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BEYOND THE BOTTOM LINE: EXPLORING THE MULTIFACETED IMPACTS
AND ADAPTIVE MANAGEMENT OF AN EMERGENCY FOOD ASSISTANCE
PROGRAM

A Thesis Presented

by

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ABSTRACT

Paper 1: The multiplier effect in action: perceived indirect impacts of innovative emergency feeding programming on communities

The COVID-19 pandemic amplified or magnified several interconnected slow-crises, including hunger, housing, vulnerable food supply chain, and job insecurity. Closely interconnected with this surge in food insecurity were other social issues worsened by the pandemic, such as unemployment, poverty, and health disparities. These challenges were disproportionately experienced by low-income households and communities of color (Head & Alford, 2015; Christensen & Læg Reid, 2020). Many interventions were made across the globe to mitigate the direct and indirect impacts of the pandemic, including food and hunger intervention programs like the Vermont Everyone Eats (VEE) emergency feeding program. There is evidence that the VEE funds were amplified through a "three-legged stool" approach; supporting local restaurants, and food producers, and addressing food insecurity simultaneously (Vermont Everyone Eats, 2023). This paper argued that the relief money from the VEE program was multiplied in ways that cannot be fully accounted for within a capitalistic model. Drawing on an analysis of 44 interviews with VEE leadership, the program multiplied relief money to develop a statewide identity, new norms, and new networks that are difficult to quantify financially. I asked, beyond the direct impacts, what indirect impacts did VEE leadership perceive the VEE feeding program as having on Vermont communities? VEE was perceived by program administrators to have contributed to Vermont communities' resilience by (1) improving service delivery of food aid programs, (2) building and empowering communities, and (3) breaking silos and forming unlikely partnerships, all indirect impacts of the program far extending beyond its measurable and intended or direct economic and other benefits.

Paper 2: Navigating the certainties and uncertainties: emergency feeding program management and federal disaster relief funding.

Communities must navigate both certainties and uncertainties as they experience and respond to crisis like the COVID-19 pandemic, a chaotic situation which brought with it many underlying societal issues, including food insecurity. I sought to understand what impacts VEE Leadership perceived federal disaster response funding structure as having on the design and delivery of the VEE emergency feeding program. I looked at how organizations involved in the design processes navigated and responded to those certainties and uncertainties in their decision-making processes and the implementation of the program. Findings show that how the emergency response funding program was structured created both certainty and uncertainty during times of crisis. Federal disaster response funding, with its short-term cycles and uncertainty around renewal, created significant challenges for stakeholders in planning, adapting, communicating with partners, and ensuring continuity of services during the crisis even though it enabled the rapid launch of VEE at the onset. Through the experiences of the organizers of VEE, we see the complex interplay between certainty and uncertainty that surround the management of an emergency feeding program. It shows that funding though positive, could present initial certainties by providing initial financial resources to roll out the program effectively. Despite these challenges, Vermont Everyone Eats demonstrated remarkable adaptability and resilience.

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CHAPTER 1: LITERATURE REVIEW

1.1. Introduction

The COVID-19 pandemic amplified or magnified several interconnected slow-crises, including hunger, housing, vulnerable food supply chain, and job insecurity. When lockdowns and economic slumps unfolded, vulnerable populations experienced increased difficulties and challenges in accessing essential resources for their survival, leading to increased social and slow crises. The pandemic (March 11, 2020 – May 05, 2023 (Centers for Disease Control and Prevention [CDC], 2024; World Health Organization [WHO] 2024)) revealed known and unknown systemic inequalities and vulnerabilities that had shrouded societies across the globe.

The United Nations reported that the pandemic could push up an additional 132 million people into chronic hunger by the end of 2020 (Bongaarts, 2021; Food and Agriculture Organization [FAO] et al., 2020). In 2022, the FAO reported that the global hunger numbers rose to 828 million, which was 150 million higher than pre-pandemic times. FAO et al. (2024) revealed that in 2023, between 713 and 757 million people, which corresponds to 8.9% and 9.4% of the global population may have faced hunger, 152 million above the numbers in 2019. On the national scale in the United States of America, rates of food insecurity increased from 10.5% in 2019 to 13.8% in 2020 (Coleman-Jensen et al., 2019). Niles et al. (2020) in their research in Vermont found that rates of food insecurity had nearly doubled from 18.3% to 32.3% during the first few months of the pandemic (McCarthy et al., 2022; Niles et al., 2020). Closely interconnected with this surge in food insecurity were other social issues worsened by the

pandemic, such as unemployment, poverty and health disparities. These challenges were disproportionately experienced by low-income households and communities of color (Christensen & Lægreid, 2020). Hunger and job insecurity were interconnected. For example, when people lost their jobs during the pandemic, it led to increased poverty, which also led to food insecurity and mental health challenges (Moon, 2020). School closures disrupted education, as well as access to school meals for many children, further increasing food insecurity for vulnerable families (Niles et al., 2020). Perpetuating the challenges of hunger and job insecurity, extreme disruptions to supply chains caused widespread unemployment, which ended up putting strains on social support systems.

1.1.1. Wicked Problems

Contemporary issues, such as food and economic security, are complex and have interconnected challenges. These issues are often described as 'wicked problems' (Alford & Head, 2017; Head & Alford, 2015; Head, 2023), indicating their complexity, intractability, and the intense debate they generate about both problems and solutions. 'Wicked problems' (Head & Alford, 2015; Head, 2023), are complex and interconnected challenges, generating intense debate as communities define the problems and design meaningful solutions. Wicked problems become increasingly complex within the context of crises. For example, food security and economic livelihood are interconnected complex issues that became increasingly complex within the context of COVID-19 public health crisis.

Wicked problems are inherently characterized by uncertainties (Rittel & Webber, 1973). Uncertainties stem from the difficulty in precisely defining the problems and

associated solutions (Rittel & Webber, 1973). Uncertainties about the nature and scope of the problem lead to uncertainties about how to move forward with a meaningful response. In addition to trouble identifying problems and solutions, wicked problems are embedded in uncertainty because there are no clear points at which one can say that the problem is solved, which creates uncertainties about when it is sufficient to bring an intervention to an end (Alford & Head, 2017; Head & Alford, 2015; Head, 2023; Rittel & Webber, 1973). The uncertainty surrounding wicked problems makes it uncertain for lessons from past experiences to be applied as new problems arise (Alford & Head, 2017; Head, 2023; Rittel & Webber, 1973).

The COVID-19 pandemic was one such wicked problem, particularly in how it amplified uncertainties around the globe. The virus's constant mutations and evolving patterns of transmission created ongoing uncertainties about its behavior and impact (Christensen & Lægreid, 2020). This evolving information and policy environment during the COVID-19 contributed significantly to the levels of uncertainty that surrounded this wicked problem. The rapidly changing information landscape and dynamic policy responses added layers of complexity and uncertainty. As new scientific findings emerged, public health guidance often shifted, leading to confusion and skepticism among the public (Raman et al., 2021; Sahoo et al., 2022). Simultaneously, policymakers had to make decisions in an environment of incomplete and evolving information, resulting in diverse and sometimes conflicting policy approaches across different regions and countries (Capano et al., 2020). COVID-19 health experiences

interacted with various existing economic, social environmental, and health systems in complex ways, making outcomes highly uncertain (Moon, 2020).

Balancing public health measures with economic and social needs introduced additional layers of uncertainty in decision-making across the world (Alford & Head, 2017; Daviter, 2017; Grint, 2020; Head & Alford 2015; Head, 2023). Uncertainties are significantly magnified in co-occurring crises, producing a complex web of challenges that are problematic to predict and manage. When crises overlap or interact, their synergy effects exceed the sum of their individual impacts. The phenomenon, sometimes referred to as a "polycrisis," could overwhelm existing systems and strategies, and lead to record levels of uncertainty (Capano et al., 2020). For example, when COVID-19 co-occurred with other public health, economic and security issues, the uncertainties were further magnified (Christensen & Lægheid, 2020). These interactions between multiple crises created new, unforeseen challenges, that increased overall uncertainty (Moon, 2020). For instance, the pandemic's impact on global supply chains interacted with pre-existing economic vulnerabilities, which led to complex and unpredictable economic outcomes. The virus's spread also interacted with social and political tensions, further confounding public health responses (Christensen & Lægheid, 2020; Moon, 2020). There were uncertainties about the allocation of resources across multiple pressing needs. Interventions aimed at one crisis had several unpredictable impacts on other ongoing issues, amplifying uncertainty about outcomes (Peters, 2017; Termeer et al., 2015). These call for decision makers to embrace flexible, iterative approaches to problem solving that can adjust to the rapidly evolving circumstances and new information. (Alford & Head,

2017; Head & Alford, 2015; Termeer et al., 2015). It also calls for collaborative problem-solving and robust decision making in a highly uncertain world. (Alford & Head, 2017; Head, 2023; Termeer et al., 2015).

1.1.2. Federal Disaster Relief Authority's Response to Crises

While crises are filled with uncertainty, the federal disaster relief authority's support within the US is designed to provide certainty. The emergency response financial support provided by the federal disaster relief authority is valuable to response and recovery efforts; however, its funding structure can also create uncertainty for communities. Kousky (2018) on how America communicates flood risks highlighted that the federal disaster relief authority's disaster assistance programs offer a safety net for communities, which reduces uncertainty about post-disaster recovery resources and processes. Kousky (2018) argued that the availability of federal aid could create moral hazard, which potentially increases uncertainty about long-term community resilience. Highfield et al. (2014) explored how the federal disaster relief authority's policies and support inclined local decision-making during recovery from Hurricane Ike. They argued that, while the federal disaster relief authority's guidance did provide a framework for action, it also presented various uncertainties linked to funding timelines and eligibility criteria, which affects local recovery planning.

1.1.3. Vermont Everyone Eats, a COVID-19 Response

Launched in August 2020 (JSI Research & Training Institute, Inc. [JSI], 2020; Massie & Heiss, 2025; Schuster & Klieger, 2023; Vermont Everyone Eats [VEE] Economic Analysis, 2023), the Vermont Everyone Eats was an emergency program

designed to address food insecurity while addressing economic development and local agriculture. The VEE program was funded by the state of Vermont and the federal disaster relief authority (JSI, 2020; Schuster & Klieger, 2023; VEE Economic Analysis, 2023). VEE distributed over 3.6 million meals between August 2020 and March 2023, leveraging more than \$46 million in federal COVID-19 relief funding (JSI, 2020; Massie & Heiss, 2025; Schuster & Klieger, 2023; VEE Economic Analysis, 2023). VEE was a multifaceted emergency program addressing food insecurity, economic development, and local agriculture in Vermont (Massie & Heiss, 2025; VEE Economic Analysis, 2023). The program provided nutritious prepared meals to Vermonters in need, while simultaneously boosting the local economy by keeping local restaurants, food producers, and farmers in business (JSI, 2020; Schuster & Klieger, 2023; VEE Economic Analysis, 2023).

VEE operated using a unique cross-sector approach which engaged local restaurants to prepare meals with locally sourced ingredients for Vermonters who were experiencing food insecurity or found it harder to get food due to the COVID-19 pandemic. Beneficiaries of the program did not need to show proof of need to be able to access the program. Southeastern Vermont Community Action (SEVCA), the main administrative body, guided the formation of a Statewide Task Force, which comprised of representatives from various agricultural and economic development agencies and boards, hunger relief organizations and restaurants (VEE Economic Analysis, 2023). There were fourteen Community Hubs across the state of Vermont that coordinated the

production and distribution of meals at the community and local levels (Massie & Heiss, 2025; VEE Economic Analysis, 2023).

VEE's impact extended far beyond its food security goals. With an economic multiplier effect of \$78 million, \$10.1 million in private investment by restaurants, farms, and food producers, improved economic resilience which retained over 400 full-time employees, the establishment of new partnerships between farmers and restaurants, and enhanced community cohesion among others, the successes of the program can only go on (VEE Economic Analysis, 2023). VEE's successes demonstrate how effective a collaborative integrative approach to addressing (Massie & Heiss, 2025) complex societal issues like food insecurity can be. Following the program in March 2023, many other local initiatives have been inspired to continue in similar efforts using VEE's innovative model.

As an emergency response program, VEE stands out compared to other food programs due to how it uniquely and innovatively addresses food insecurity together with supporting local economies (VEE Economic Analysis, 2023). In its design and implementation, VEE was designed to support individuals facing food insecurity, local restaurants and farmers in Vermont. Over \$34 million revenue was generated by participating restaurants and more than \$3.5 million for local farmers and food producers (JSI, 2020; Schuster & Klieger, 2023; VEE Economic Analysis, 2023). VEE was a community-based implementation program. Hubs across all 14 counties in the state were put in charge of the day-to-day running of the program. Through the oversight of the hubs, restaurant quality meals were distributed to Vermonters facing food insecurity at

the time, which not only addressed nutritional needs but also offered a sense of dignity and normalcy to recipients. The program created a multiplier effect that stimulated additional economic activities beyond the initial investments, which was crucial during a time when many businesses faced various forms of financial uncertainty and closures. Even though a temporal emergency measure of addressing food insecurity during a time of the COVID-19 pandemic, VEE brought to light the gaps in the existing food security system and demonstrated the potential for collaborative cross-sector solutions (Massie & Heiss, 2025; Schuster & Klieger, 2023).

1.1.4. Problem Statement

While research has examined the interconnected nature of complex problems, more research is needed to examine the interconnected consequences, desired and undesired, associated with emergency response programs aimed at increasing short- and long-term **resilience**. **This thesis examined the VEE program within a complex set of interconnected systems during the pandemic. In particular, what variables did an Emergency Food Program Leadership Perceive as impacting the Design and Delivery of Vermont Everyone Eats (VEE), and what impact did the program have on Vermont?**

To examine this question, I analyzed 42 interviews with VEE leadership regarding how the program was organized and the lessons learned through the design and development, implementation, and closing of the VEE program. Based on this analysis and a review of the literature, I identified two forceful and reoccurring themes that I will explore in two research articles as a part of my thesis.

In the first analysis chapter, I ask, beyond the direct impacts, what indirect impacts did VEE leadership perceive the VEE feeding program as having on Vermont communities? I try to find the unquantifiable impacts of the program as perceived by program administrators. By exploring aspects of community resilience that cannot be easily measured, the study can inform more holistic approaches to policy design and program evaluation. This is important to policymakers, emergency management professionals, food system researchers and emergency food response managers because complex, often intangible aspects of resilience are difficult to quantify or commodify in traditional economic analysis of emergency response programs. It will provide insights into the limitations of purely economic metrics for evaluating the success of emergency response programs.

The second analysis chapter was informed by a theme within and across participant interviews regarding how VEE organizing practices were impacted by funding mechanisms. **I ask, how did federal emergency relief funding that supported the VEE program impact Vermonter's resilience during the pandemic? More specifically, how did certainties and uncertainties associated with federal emergency funding enable and constrain organizations involved in emergency hunger response programing in Vermont?** How does federal emergency funding create conditions of certainty and uncertainty during emergency response program design and implementation?

This is an important project because it examines how innovative programs can effectively respond to complex crises by embracing varying degrees of uncertainty and

adapting to changing conditions. It offers valuable lessons for improving the design, implementation, and management of emergency response programs, particularly those that aim to address multiple systemic challenges simultaneously. I adopt an uncertainty framework (Lu, 2017-a, 2017-b; Snowden & Boone, 2007) for examining the interviews in response to these questions.

Before presenting my two analysis chapters, I review the relevant literature and interview methods. This thesis concludes with a discussion of theoretical and practical implications for policymakers, emergency management professionals, and food systems stakeholders and emergency feeding program administrators, as well as limitations of the study and future research suggestions. I will conclude with a reflection statement regarding my growth as a researcher and professional in community development and applied economics.

1.2. Literature Review

1.2.1. Vermont Food System Resilience

Vermont's community culture played a significant role in shaping the response to the COVID-19 pandemic, especially in initiatives like the Vermont Everyone Eats (VEE) program (Sawyer, 2017; Whitehouse et al., 2023). Known for its strong sense of community, Vermont has a history of coming together to support neighbors in times of need. This communal spirit was exemplified during the pandemic as individuals, organizations, and businesses rallied to address the challenges brought about by the public health crisis. The VEE program, rooted in Vermont's culture of community empowerment and collaboration, resonated with the values of mutual support and

solidarity that are deeply ingrained in the state's social fabric. Vermonters have a tradition of valuing local food systems, sustainability, and collective well-being, making the VEE program a natural extension of these shared values. The program not only provided essential support to individuals experiencing food insecurity but also reinforced the interconnectedness of Vermont's communities and the importance of working together to overcome adversity.

A food system is the entire range of actors and their interlinked value-adding activities involved in the production, aggregation, processing, distribution, consumption, and disposal (loss or waste) of food products that originate from agriculture (including livestock), forestry, fisheries, and food industries, and the broader economic, societal, and natural environments in which they are embedded (FAO et al., 2018; Hueston & McLeod, 2012; Nguyen, 2018; Verstraeten et al., 2022; Von Braun et al., 2021). Food systems exist at global, regional, national, and local levels (Hueston & McLeod, 2012; Nguyen, 2018; Von Braun et al., 2021). Food systems do not operate in isolation. Surrounding food systems are many other systems that feed into the system to aid its functioning. These include health systems, ecological and climate systems, economic and governance systems, science and innovation, and systems among (Hueston & McLeod, 2012; Nguyen, 2018; Von Braun et al., 2021). It encompasses income and employment; agricultural and food industries; markets, infrastructure, and services; and consumption, nutrition, and health.

Food systems are impacted by and impacts local agriculture, community economy, local businesses, and state and local policies among others. It both impacts and

is impacted by the community economy through the creation of jobs, the production of foods locally, and the resultant circulation of money in the community through the forces of demand and supply within the community. Embedded in the vitality of a community are its local food markets, restaurants, and other food-related services, as food is a necessity.

Food systems have an effect on the physical environment too. Through the start of food chains, from production to distribution have a lot to do with natural resources like water, land, air, etc. The health outcomes of a community are also impacted by the food system. Members of a community mostly rely on the food provisions of that community's food systems and will experience both the positive and negative health implications associated with that food system. Food systems influence and are influenced by policies surrounding agriculture, food safety, and food distribution. Local businesses provide food and all other commodities needed by the community. They play a huge role in providing goods and services for the consumption of community members, from restaurants to grocery stores, to shops, and to markets.

According to Newnan (2017), food systems are of a much larger complex scale than the typical "production- distribution-consumption pattern". The interrelatedness of food systems with all other systems results in a situation where a problem in the food system affects all other systems that are connected to it. Newnan (2017) modeled a three-dimensional model showing the interconnectedness of food systems with other systems. With 20 factors, 50 relationships and 4 feedback loops (Newnan, 2017), it is evident that an issue with one of these can cause a crumple in the entire food system and all other

related systems. This results in a series of interconnected problems which would require a multidimensional approach to solving. With multiple feedback loops in the systems, attempts at solving a problem in the system must be geared towards multiple systems and subsystems of the system rather than a single part.

Food system as an interconnected system is fraught with cascading effects on the system and its related environments. Interlinkages occur between the multiple components of the food system and must be dealt with as an interconnected system rather than in isolation (Nguyen, 2018; Obayelu & Ayansina, 2022). Food systems are made up of all the people, institutions, places, and activities that are involved in the growing, processing, transporting, selling, marketing, and eating of food, making problems and solutions cut across boundaries, and creating the need for integrated policy approaches. (Food Systems Dashboard, 2024; Nguyen, 2018). As such, there are tradeoffs and synergies associated with a food system. This happens where the addressing of one issue occurring in the food system turns to negatively impact another section of the food system. It is therefore important to understand and manage these synergies and tradeoffs between and among the outcomes of the food system. It requires addressing multiple dimensions simultaneously and considering all the various feedback loops and linkages in the system.

1.2.2. Resilience and Complex Systems

Resilience has become a growing topic of interest for researchers in diverse fields. Resilience is a process of navigating shocks through an ongoing management of capabilities within a community (Copeland et al., 2020). It encompasses the ability of a

social system to recover from disasters or shocks. The shocks and disruptions that communities face are uncertainties, both known and unknown, that disrupt the normalcies that these communities are familiar with. Due to the complexity and limited control, one has on disruptions of systems, it is important that the resilience efforts of communities to adjust and adapt to changes becomes a multidimensional continued effort.

In complex systems, it is important to view resilience as an ongoing social process where stakeholders involved collectively define problems and co-construct possible solutions. This approach ensures that actors recognize how uncertain and ambiguous environments are, and that no single actor could completely understand the challenges or their resolutions (Berkes, 2007). Resilience emerges when there are continuous interactions and adaptations among systems, rather than as a fixed attribute. Folke et al. (2010) argue that resilience is “the capacity of a system to absorb disturbance and reorganize while undergoing change so as to still retain essentially the same function, structure, identity, and feedback” (Folke et al., 2010, p. 4). This definition places importance on the dynamic nature of resilience, which involves systems evolving and transforming in response to disruptions. Uncertainty plays a crucial role in shaping both the challenges and potential solutions when it comes to complex problems.

With the interconnectedness of system elements and the unpredictability of their interactions comes uncertainty (Walker & Salt, 2006). Due to this, stakeholders in problem-solving capacities must embrace this uncertainty as an innate piece of the problem-solving process. The definition of problems and identification of solutions in

unsettled environments requires diverse perspectives from a wide range of stakeholders engaging to capture different viewpoints and expertise (Armitage et al., 2008). In addition, it requires iterative learning where there is a continuous update of understanding as new information emerges (Folke et al., 2010), and adaptive management where there is an implementation of flexible strategies that could be adjusted based on feedback and changing conditions (Allen et al., 2011). When uncertainty is acknowledged together with collaborative approaches, more robust and adaptable solutions to complex challenges can be developed by stakeholders, enhancing system resilience and building collective capacity for navigating future uncertainties.

Through its size, traditions, and culture, the food system in Vermont depicts a complex system. The Vermont food system includes the interconnectedness of the economy, agriculture, environment and the community. Sawyer (2017) takes note of Vermont's approach as one that integrates economic development, environmental stewardship and social equity goals in creating a more resilient system. In Vermont, the agricultural tradition pays attention to the diversity of production and is adaptable to changing conditions. From previously being primarily dairy, it now boasts a mix of dairy, specialty crops, maple syrup, and other value-added products over the years (Vermont Agency of Agriculture, Food and Markets, [VAAF], 2020), which has enhanced resilience by reducing dependence on a single sector.

The food culture in Vermont is one that prioritizes the production and consumption of local goods. More than thirteen percent of food purchases are from in-state sources (Vermont Sustainable Jobs Fund, 2021), tying communities together

strongly and reducing their vulnerability to external supply chain disruptions. The food systems space in Vermont is governed through a collaborative approach that involves multiple stakeholders in the planning and decision-making processes. Sawyer (2017) highlighted how it “creates opportunities for adaptive management and social learning” which are critical for being resilient. Innovation is balanced with traditional practices, evident in their artisanal cheese and maple syrup industries, allowing for the cultural heritage to be preserved even as they adapt to new challenges and opportunities. Systems thinking is applied and adapted to recognize complex interactions between different components of the food system. Whitehouse (2022) argued that the systems approach “enables more effective identification of leverage points for change and resilience building.”

Vermont's community culture played a significant role in shaping the response to the COVID-19 pandemic, especially in initiatives like the Vermont Everyone Eats (VEE) program (Sawyer, 2017; Whitehouse et al., 2023). Known for its strong sense of community, Vermont has a history of coming together to support neighbors in times of need. This communal spirit was exemplified during the pandemic as individuals, organizations, and businesses rallied to address the challenges brought about by the public health crisis. The VEE program, rooted in Vermont's culture of community empowerment and collaboration, resonated with the values of mutual support and solidarity that are deeply ingrained in the state's social fabric. Vermonters have a tradition of valuing local food systems, sustainability, and collective well-being, making the VEE program a natural extension of these shared values. The program not only provided

essential support to individuals experiencing food insecurity but also reinforced the interconnectedness of Vermont's communities and the importance of working together to overcome adversity.

Again, Vermont's culture of resilience and innovation was evident in the adaptation and implementation of the VEE program in response to the challenges posed by the pandemic. Community members, volunteers, and local businesses came together to ensure the success of the program, demonstrating a commitment to finding creative solutions to complex problems. The program's emphasis on collaboration, inclusivity, and compassion reflected the ethos of Vermont's community culture, highlighting the state's ability to mobilize resources, build partnerships, and address critical needs during times of crisis.

1.2.3. Vermont Food System as a Complex System

The COVID-19 pandemic was not only a threat to the health of people across the globe, but it also came with various challenges and adverse effects on several systems and sectors. Vermont's interconnected food system, just like any other, experienced profound and far-reaching impacts of the COVID-19 pandemic that caused disruptions in established patterns and created widespread uncertainty across multiple sectors. These interruptions span production, food insecurity, supply chains (distribution and retail), employment, and consumption, among others. Shockwaves hit Vermont's food space almost overnight when restaurants closed, farmers' markets were disrupted, and various shopping habits of consumers were shifted drastically. These alterations were faced

throughout the food supply chain, from farmers and producers to distributors, retailers, and consumers.

Food insecurity became a critical concern, as rates spiked dramatically during these early times of the pandemic. McCarthy et al. (2022) in their study of the impacts of COVID-19 on food security found a 33% increase in food insecurity since March 2020, with 30% of households in Vermont facing food insecurity, and 1/3 of them being food insecure for the first time. Multiple factors including job losses, reduced income, disruption of food assistance programs and normal food access channels were attributed to the surge in food insecurity. Niles et al. (2020) also found food insecurity to have increased drastically during the pandemic. It had more than doubled, rising from 18.3% to 35.5%. The increase was more pronounced among more vulnerable populations. Households with children experienced a 27% increase in food insecurity, those earning less than \$50,000 annually saw a 42% increase, with BIPOC (Black, Indigenous, and People of Color) communities facing disproportionately higher rates of food insecurity. 69% of respondents in the study conducted by Niles et al. (2020) experienced food access challenges, citing supply chain disruptions as one of the key factors. There were shortages of certain foods in grocery stores, reduced capacities of food processing facilities due to social distancing requirements, challenges in the logistics of food product transportation and shifts in demand patterns as consumers change their shopping and eating habits. According to Whitehouse et al. (2023), local farmers and food producers had to quickly adapt to these changes, with many pivoting to direct-to-consumer sales models or online platforms to maintain their businesses.

At the onset of the pandemic in 2020 came unprecedented uncertainty in the economy and labor market of Vermont. Approximately 40% of Vermonters interviewed reported going through job losses during the early stages of the pandemic (McCarthy et al., 2022). Niles et al. (2020) also found that 45% of surveyed Vermonters had experienced various forms of employment disruptions, including job losses, reduced hours, or furloughs. This employment instability directly affected the food security and the purchasing power of households. The rate of unemployment in Vermont shot up from 2.4% in February 2020 to 15.6% in April 2020, which was the highest level recorded in the state's history (Vermont Department of Labor, 2021). Even though the rate improved over the period, it remained high compared to the periods prior to the pandemic. Even though there was no precise data on homelessness during the pandemic due to how fluid the situation was, reports show that there was an increase in housing insecurity in Vermont. The Vermont Coalition to End Homelessness (2021) reported a 133% increase in the number of people experiencing homelessness between January 2020 and January 2021, rising from 1,110 to 2,591 individuals.

Key employers in the state like restaurants, hotels and other hospitality service providers were hit very hard because of severe restrictions and closures because of the COVID-19 pandemic. Similarly, grocery stores and other food businesses struggled with keeping up with demand and meeting their needed levels of staffing. At the bane of the challenges thrown at the Vermont food system during the early days of the pandemic were disruptions in the supply chain.

The pandemic exposed and aggravated existing vulnerabilities in Vermont's food system while also spurring innovative responses. There was increased interest in and support for local food systems. Whitehouse et al. (2023) noted a surge in community-supported agriculture (CSA) memberships and direct farm sales as consumers sought to support local producers and secure reliable food sources. The pandemic necessitated rapid expansion and adaptation of emergency food programs. The Vermont Foodbank reported a 72% increase in food distribution during the first three months of the pandemic compared to the same period in 2019 (Vermont Foodbank, 2020). The state implemented various policy measures to address food insecurity, including the Vermont Everyone Eats program, which provided meals to those in need while supporting local restaurants and farmers (Massie & Heiss, 2025). Many food businesses and farmers markets transitioned to online platforms and delivery models to continue serving customers while adhering to social distancing guidelines (Whitehouse et al., 2023). Kolodinsky et al. (2020) observed increased community cohesion and mutual aid efforts, with many Vermonters' reporting helping neighbors with food access during the pandemic. The COVID-19 pandemic had far-reaching impacts on Vermont's food system, exposing vulnerabilities but also demonstrating the resilience and adaptability of communities and food system actors. The interconnected nature of food production, distribution, and consumption became evident, highlighting the need for holistic, systems-based approaches to addressing food security and economic stability in times of crisis.

1.2.4. Vermont Everyone Eats

Vermont Everyone Eats (VEE) is a notable emergency feeding program that responded to a set of complex challenges posed by the COVID-19 pandemic. Launched on August 1, 2020, through March 31, 2023, the VEE program provided nutritious meals to Vermont residents while also supporting local restaurants and farmers who were impacted by the economic disruptions caused by the pandemic. This innovative program not only addressed immediate food needs but also fostered community resilience and collaboration during a time of crisis. The program was designed as a feeding initiative that simultaneously tackled food insecurity, economic instability in the restaurant sector, and support for local agriculture (Massie & Heiss, 2025). Against the backdrop of the pandemic, the VEE program played a crucial role in mitigating the effects of food insecurity and economic instability in Vermont. By leveraging federal funding through the Coronavirus Relief Fund, and support from the State of Vermont, the program facilitated the distribution of locally sourced meals to individuals and families facing challenges related to access to food. The VEE program not only served as a lifeline for those in need but also contributed to the sustainability of Vermont's agricultural sector by creating a market for local producers and food establishments.

The VEE program exemplified a collaborative and adaptive response to the multifaceted challenges brought about by the pandemic. Through partnerships with community organizations, restaurants, and food producers, the program demonstrated the power of collective action in addressing complex social issues. Through promoting food security, supporting local businesses, and fostering a sense of community companionship,

the VEE program showcased the resilience and innovation of Vermont's response to the crisis, highlighting the importance of solidarity and cooperation in times of uncertainty.

VEE operated through a network of 14 community hubs spanning all counties in Vermont. These hubs were managed by diverse organizations, including farm-to-table initiatives, downtown resiliency groups, recovery support programs, food security advocates, and community action agencies. The hubs coordinated relationships between local restaurants, farmers, community organizations, and meal distribution partners to source, produce, and deliver meals to those in need (JSI, 2020; VEE Economic Analysis, 2023). The program was administered by Southeastern Vermont Community Action (SEVCA), also the program's statewide grantee, through a regional hub community of practice and guided by a Statewide Task Force comprising representatives from restaurants, economic development, and hunger relief organizations. This collaborative governance structure allowed for adaptive management and social learning, crucial for addressing complex systemic issues (Massie & Heiss, 2025).

VEE distributed over 3.6 million meals between August 2020 and March 2023, with 25000 meals being distributed weekly (VEE Economic Analysis, 2023). The program engaged 321 restaurants, with 211 still active at the program's conclusion. Restaurants were paid \$10 per meal, providing them with a crucial revenue stream during the pandemic (Massie & Heiss, 2025). VEE required that at least 10% of meal ingredients be sourced locally. Over 260 farmers participated, with 35% of meal ingredients coming from Vermont farms (JSI, 2020; Schuster & Klieger, 2023; VEE Economic Analysis, 2023), providing huge support to local agriculture. The program leveraged more than \$46

million in federal COVID-19 relief funding. According to economist Elizabeth Schuster, VEE's multiplier effect likely catalyzed as much as \$66 million in additional local spending (VEE Economic Analysis, 2023). The meals provided were required to be of a nutritious balance, taking guidance from the USDA My Plate (VEE Economic Analysis, 2023). VEE operated through 14 community hubs across Vermont, managing relationships with local restaurants, farmers, community organizations, and meal distribution partners (JSI, 2020; VEE Economic Analysis, 2023). These locally governed community hubs assess the needs and resources that would be needed to execute the program in their regions and connect directly with restaurants and meal beneficiaries.

Members of the statewide Task Force bring into the program their extensive experience with food insecurity programs, government agencies economic development agencies, and restaurant engagement to strategically provide guidance to the program (VEE Economic Analysis, 2023). Meals were delivered to various locations including food shelves, community meal sites, schools, and senior centers (Massie & Heiss, 2025). VEE made use of digital platforms in its running. It utilized the Localvore App for efficient meal distribution coordination (JSI, 2020; VEE Economic Analysis, 2023). With this, customers and service recipient did not need to physically be present at restaurants or distribution centers to receive meals, they could access the meals program on the app through the comfort of their homes, which was very handy in the time of pandemic where it was important to limit the times one goes out into the public. VEE's target was to focus on reaching populations that experienced higher levels of food insecurity (Massie & Heiss, 2025). Clients did not need to submit evidence or proof of their need before being

allowed to access these meals. They used a unique self-certification or self-attestation process for showing eligibility for meals to reduce stigma that was usually associated with charitable food systems. (Massie & Heiss, 2025). In terms of community building, the program facilitated weekly meetings among hub managers and representatives of agencies, that fostered a community of practice (JSI, 2020), created community connections and resilience (Massie & Heiss, 2025).

Funding for a program as crucial as the VEE during a time of crisis was as important as the program itself. VEE was primarily funded by the federal government through the federal disaster relief authority's COVID-19 relief monies, with support from the state of Vermont. Nearly \$49 million in total funding was spent on the program. \$47.5 million was from the federal disaster relief authority, while the state of Vermont's legislature provided a top up of \$1.3 million (VEE Economic Analysis, 2023; JSI, 2020; Schuster & Klieger, 2023). Funding of the program was in sessions, with chances of renewal when it becomes necessary to do so. This brings us to consideration of the federal disaster response funding structures.

1.2.5. Federal Disaster Response Funding

The federal disaster relief authority plays a crucial role in enhancing the nation's preparedness and response capabilities to various disasters and emergencies, including Vermont's COVID-19 pandemic response programming. Through a range of grant programs, the federal disaster relief authority supports citizens, first responders, and communities in building, sustaining, and improving their capacity to prepare for, protect against, respond to, recover from, and mitigate the impacts of terrorism, high-

consequence disasters, and other emergencies (FEMA, 2015; FEMA, 2021; FEMA, 2024-a, 2024-b). The preparedness grants are the Homeland Security Grant Program (comprising the State Homeland Security Grant Program, the Urban Area Security Initiative, and Operation Stonegarden), the Tribal Homeland Security Grant Program, the Nonprofit Security Grant Program, the Transit Security Grant Program, the Intercity Passenger Rail Program, the Intercity Bus Security Grant Program, the Port Security Grant Program, and the Emergency Management Performance Grant Program (FEMA, 2015; FEMA, 2021). These preparedness grants aim to foster collaboration and coordination at the national level to ensure a unified and effective response to crises. In addition to preparedness grants, the federal disaster relief authority provides funding for hazard mitigation assistance, which focuses on implementing sustainable measures to reduce or eliminate long-term risks to people and property from future disasters.

The federal disaster relief authority's grant programs extend to initiatives such as the Shelter and Services Program, the Emergency Food and Shelter Program, and support for dam safety and earthquake risk reduction efforts (FEMA, 2024a). The Shelter and Services Program provides funds to non-federal entities that provide sheltering and other eligible services to noncitizen migrants who have been encountered by the Department of Homeland Security and released from custody while awaiting the outcome of their immigration proceedings. The Emergency Food and Shelter Program (EFSP) is a federal disaster relief authority-funded program that supplements and expands the ongoing work of local nonprofit and governmental social service organizations to provide shelter, food, and supportive services to individuals and families who are experiencing, or at risk of

experiencing, hunger and/or homelessness (FEMA, 2024a). By investing in these diverse programs, the federal disaster relief authority works to enhance the resilience of communities, protect lives and property, and mitigate the impacts of various hazards, ultimately contributing to a safer and more secure nation.

1.2.6. VEE Funding Structure

Funding is crucial to programs, especially ones as huge as the Statewide VEE. VEE's funding structure evolved throughout its operation. The federal disaster response funding was primarily the main source of finance for VEE, which was allocated for emergency food assistance and economic stabilization during a time of the pandemic where hunger issues rose, and economic activities had a downturn globally. Initially, the program was funded in July 2020 through a \$5 million allocation from the Coronavirus Relief Fund (CRF) to Vermont's Agency of Commerce and Community Development (ACCD) (VEE Economic Analysis, 2023), and a subsequent allocation of \$400,000 in late December 2020.

With the anticipated end date of CRF funds being December, VEE was expected to expire in December 2020 (VEE Participant Survey Report, 2023). In recognition of the VEE as a critical part of Vermont's emergency mass feeding COVID-19 response strategy at solving food needs, the federal disaster relief authority on December 22, 2020, reimbursed 75% of the program's costs (VEE Participant Survey Report, 2023). The federal disaster relief authority from March 2021 to June 30, reimbursed 100% of all program costs (Vermont Everyone Eats, 2023). As of July 1, 2022, funding became a cost-share approach. The federal disaster relief authority switched to a 90/10 cost-share

model, with the Vermont state legislature allocating \$1.3 million toward the 10% cost share (JSI, 2020; VEE Economic Analysis, 2023). During the running of the program, it was extended from an original end date in late December 2020 to June 30, 2021, then to September 30, 2021, and then to December 31, 2021 (VEE Participant Survey Report, 2023) as the demand for VEE meals increased in the wake of the pandemic.

In the final stages of the program's life in March 2023, VEE had leveraged over \$46 million in federal COVID-19 relief funding (VEE Economic Analysis, 2023) over its life span of 32 months from August 2020 to March 2023 (Vermont Business Magazine, 2023; VEE Economic Analysis, 2023). This funding structure allowed VEE to operate continuously for 32 months, adapting to changing circumstances and needs throughout the pandemic. The transition from full federal disaster response funding to a cost-share model highlights the evolving nature of emergency response programs and the need for flexible, adaptive funding mechanisms in addressing complex systemic challenges. The program's ability to adapt to shifting federal emergency policies was evident in the occurrence of the change in funding structure.

Southeastern Vermont Community Action (SEVCA) was the VEE program's administrator and grantee, responsible for managing and distributing the funds from the federal disaster relief authority. SEVCA worked closely with the VEE Statewide Task Force and 14 Community Hubs across the state to ensure efficient fund allocation and the implementation of the program (Massie & Heiss, 2025). The distribution of funds through the Community Hubs was a key feature of VEE's operational structure. These hubs coordinated relationships between local restaurants, farmers, community

organizations, and meal distribution partners. They were responsible for managing local meal production and distribution, as well as collecting and reporting data necessary for the federal disaster relief authority's reimbursement (Massie & Heiss, 2025).

The funds were used primarily to reimburse restaurants for preparing meals, (\$10 per meal), support local farmers and producers, and to cover administrative costs that were associated with the distribution of meals and program administration. To secure reimbursement, VEE implemented robust reporting strategies at both the hub and organizational levels. Community Hubs were required to submit detailed reports on meal distribution numbers, participating restaurants, and associated costs to SEVCA. These reports were then consolidated and submitted to the federal disaster relief authority through Vermont's Agency of Commerce and Community Development (ACCD) monthly (VEE Economic Analysis, 2023).

Participating organizations, including restaurants and distribution partners, needed to maintain meticulous records of meals prepared, ingredients sourced locally, and costs incurred. The program utilized the Localvore App as a digital platform for meal distribution, which facilitated accurate tracking and reporting of meal distribution data (VEE Economic Analysis, 2023). This digital infrastructure was crucial in maintaining the audit trail required for the federal disaster relief authority's reimbursement and ensuring transparency in fund usage. Through this comprehensive funding and reporting structure, VEE was able to distribute over 3.6 million meals, support hundreds of restaurants and farmers, and provide critical food assistance to Vermonters in need during

the COVID-19 pandemic (JSI, 2020; Schuster & Klieger, 2023; VEE Economic Analysis, 2023).

1.3. Theoretical and Conceptual Framework

It is well documented that emergency response programs can have desirable and undesirable consequences on the short- and long- term resilience of communities and food systems. According to Sawyer (2017), emergency response programs that support local producers and distributors can strengthen these systems, enhancing long-term community resilience (Sawyer, 2017). They attributed in part Vermont's food system resilience to strong partnerships between government, non-profit and private sectors, and believe that emergency programs that foster such collaborations could have lasting positive impacts. Food systems goals must be integrated in the broader state policies for resilience to be achieved (Sawyer, 2017). Emergency programs that align with and reinforce existing policy frameworks can contribute to long-term system strength (Sawyer, 2017). I describe several theoretical frameworks for understanding VEE as an emergency food systems response program during the COVID-19 pandemic.

1.3.1. Emergency Food Programs Impact Measurement

Various methods and approaches are being adopted by other researchers to evaluate the direct and indirect impact of such programs. Both qualitative (especially interviews) and quantitative (especially surveys) methods have been used. Due to the complex nature of emergency feeding programs, diverse tools, and measurements are employed to assess their successes.

In 2020, Jablonski et al. (2021) studied the emergency food provision in five cities in the U.S. during the COVID-19 pandemic. They conducted the research with participants who were providers of emergency food services and households that had K-12 children through interviews and focus groups. According to the authors, cross-sector collaborations, adaptable supply chains, and addressing service gaps to increased-risk populations were some of the indicators of how effective a local emergency feeding program is. The qualitative approach used allowed for a more intricate understanding of local responses and challenges. Each school district and city were making different decisions about their response to the emergency because the National School Lunch Program (NSLP) and the School Breakfast Program did not have clear guidelines about the role they play in supporting continued feeding programs. By relying on qualitative data for the study, they limit the study's generalizability to other contexts.

Other authors employing quantitative methods rely on standardized survey questionnaires and food security indicators to conduct their study. Coady (2000) applied Social Cost Benefit Analysis (SCBA) to evaluate the welfare effectiveness of PROGRESSA in Mexico by identifying the programs impacts and the costs associated with those impacts. Another such tool is the Household Food Insecurity Access Scale (HFIAS) which was developed by the Food and Nutrition Assistance III Project. This tool has been used widely by many researchers in assessing the impact of food assistance programs (Coates et al., 2007). It provides a quantifiable measure of food insecurity and allows for comparing data across different periods and contexts. It may, however, not

capture all the diverse food insecurity experiences and diverse cultural contexts (Frongillo & Nanama, 2006).

Some other researchers combine both qualitative and quantitative methods and tools in assessing the effects of innovative emergency feeding programs. A systematic review of cash-based approaches to humanitarian emergencies was conducted by Doocy and Tappis (2017). Their review included studies that applied qualitatively analyzed program implementation challenges and studies of quantitative outcomes such as food consumption scores, providing a more holistic view of program impacts. This mixed method, however, can be time and resource-consuming. Program impacts over time can be measured using longitudinal studies. A randomized controlled trial of food assistance modalities in Ecuador over two years was studied by Hidrobo et al. (2018). They were able to assess the short- and long-term impact of food assistance programs on food security, dietary diversity, and other outcomes. This method, even though effective, is also fraught with resource intensiveness.

1.3.1.1 The Multiplier Effect

The multiplier effect is an important concept in macroeconomics that explains how an initial change in spending can lead to a larger change in aggregate economic activity. It is a crucial concept for understanding how changes in spending can have amplified impacts on the overall economy. As Samuelson and Nordhaus (2009) explain in their seminal economics textbook, "The multiplier effect refers to the magnification of an initial change in spending on the equilibrium level of national income" (Samuelson & Nordhaus, 2009, p. 446). The simple idea behind the multiplier effect is that when there's an injection of new spending into the economy, it creates a ripple effect. As Keynes

(1936) originally proposed in his General Theory, "The multiplier tells us by how much the equilibrium level of income will change for a given change in the level of investment" (Keynes 1936, p. 115). This initial spending becomes income for others, who then spend a portion of that income, creating income for yet others, and so on. The size of the multiplier depends on several factors, primarily the marginal propensity to consume (MPC). Mankiw (2024) defines MPC as "the fraction of an additional dollar of income that a consumer spends rather than saves" (Mankiw, 2024, p. 262), hence, the proportion of additional income that is spent rather than saved. The higher the MPC, the larger the multiplier effect will be. The basic formula for the multiplier is:

$$\text{Multiplier} = 1 / (1 - \text{MPC})$$

For example, if the MPC is 0.8, the multiplier would be $1 / (1 - 0.8) = 5$. This means that for each dollar of new spending we could potentially generate \$5 of total economic activity. However, real-world multipliers are often smaller due to various "leakages" from the circular flow of income. As Krugman and Wells (2018) point out, "The actual multiplier is likely to be smaller than the simple formula suggests because of leakages such as taxes, savings and imports" (Krugman & Wells, 2018, p. 328).

Empirical studies have tried to measure the size of multipliers in different contexts. For instance, Ramey (2011) conducted a comprehensive review of fiscal multiplier estimates and found that they typically range from 0.8 to 1.5 for government spending in the United States, depending on the specific circumstances and measurement techniques used. The multiplier effect has important implications for economic policy. As Stiglitz and Walsh (2006) note, "The multiplier effect is a key reason why changes in government spending

or taxes can have such a large impact on the economy" (Stiglitz & Walsh, 2006, p. 412). This concept underlies the use of fiscal policy as a tool for economic stabilization and growth. However, it's important to note that the effectiveness of policies based on the multiplier effect can vary. Auerbach and Gorodnichenko (2012) found that fiscal multipliers tend to be larger during recessions than during expansions, suggesting that the timing of fiscal interventions matters. The economic stimulus generated by the multiplier effect depends on the sustained investment and circulation of funds, hence, the multiplier effect ends when the initial flow of money ceases (Watson et al., 2007; Shideler & Watson, 2019). Thus, there may be more durable and lasting effects of economic activities beyond the multiplier. While its basic principle is straightforward, its real-world application involves complex interactions within the economic system. This thesis will draw on two theoretical models to guide the analysis of VEE: Multiplier Effect and Known and Unknown Uncertainties.

The Multiplier Effect in Food Systems and Emergency Response

In the context of food systems and emergency response programs, understanding the multiplier effect is crucial for assessing the full impact of interventions and investments, as it reflects how initial spending circulates through the economy. Particularly, the multiplier effect can be significant due to the interconnected nature of production, processing, distribution, and consumption (Sawyer, 2017). Studies have shown that buying local food can have a multiplier effect of 1.4-2.6 throughout the wider local economy (Sustain Ontario, 2012). This means that for every dollar spent on local food, an additional \$0.40 to \$1.60 is generated in local economic activity. Research on

farm-to-school initiatives has demonstrated multiplier effects ranging from 1.67 to 2.16, indicating that these programs benefit students and create significant economic impacts in local communities (Christensen et al., 2017). During the COVID-19 pandemic, emergency food assistance programs like Vermont Everyone Eats (VEE) demonstrated substantial multiplier effects. According to economist Elizabeth Schuster, VEE's multiplier effect likely catalyzed as much as \$78 million in additional local spending from an initial investment of \$49 million (Vermont Business Magazine, 2023; VEE Economic Analysis, 2023). Pender et al. (2019), Pender and Jo (2019), Canning and Stacy (2019), and Canning and Morrison (2019) at the USDA Economic Research Service estimates that every \$1 billion in SNAP benefits generates \$1.54 billion in Gross Domestic Product (GDP) during economic downturns, illustrating the powerful multiplier effect of food assistance programs (Canning & Morrison, 2019; Canning & Stacy, 2019; Pender & Jo, 2019; Pender et al., 2019).

While the potential of the multiplier effect in food systems and emergency response has been demonstrated in research (Shuman & Hoffer, 2007; Sustain Ontario, 2012; Swenson 2009; Sustain Ontario, 2015), there is a need for more comprehensive and standardized research in this. There is a lack of standardized methods for calculating multiplier effects in food systems, making comparisons between studies and regions difficult (Benedek et al., 2020; Shideler & Watson, 2019). Most studies focus on short-term economic impacts. More research is needed on the long-term effects of food system interventions on local economies (Sawyer, 2017). Future research should examine how multiplier effects interact with social equity, environmental sustainability, and public

health outcomes (Massie & Heiss, 2025). The unique dynamics of emergency response programs, such as their temporary nature and rapid implementation, require specialized study to fully understand their multiplier effects (Massie & Heiss, 2025).

The Vermont Everyone Eats program provides a compelling case study for examining the multiplier effect in emergency food response. VEE's innovative model, which supported local restaurants, farmers, and food-insecure individuals simultaneously, created a strong multiplier effect estimated at 2.6 (VEE Economic Analysis, 2023). This means that for every dollar spent on prepared meals, \$2.60 of economic activity was generated in the local economy. The program's success in leveraging federal funding to create widespread economic benefits while addressing food insecurity highlights the potential of well-designed emergency response programs to generate significant multiplier effects. However, the full extent and long-term impacts of these effects require further study. As researchers continue to investigate the multiplier effect in food systems and emergency response, programs like VEE offer valuable data and insights. Future studies should aim to quantify not only the immediate economic impacts but also the long-term effects on community resilience, food system infrastructure, and social equity.

Multiplier Effect as an economic theoretical concept reflects the idea that money pumped into a system will be amplified as it impacts people in its exchange. It is incredibly important to understand the financial implications and multiplier effect as it is related to federal emergency fund and other sources of tax-payer funding relief money. There is evidence that the VEE funds were amplified through a 3-legged stool (food security, economic development, and agricultural resilience), where restaurants were

reimbursed for providing meals to beneficiaries facing food security issues in Vermont. However, this paper argues that there are many ways in which that relief money was multiplied that cannot be accounted for within a capitalistic model. Drawing on an analysis of 42 interviews with VEE leadership, the VEE program multiplied relief money to develop a state-wide identity, new norms, and new networks that are difficult to account for in a financial manner, but, according to Buzzanell (2020), would serve to make the state more resilient during the pandemic and moving forward. It is impossible to account for the multiplication of those dollars from this social and resilience asset standpoint. Implications and recommendations for decision making and policy are provided in the discussion.

1.3.1.2. Direct Impacts of VEE

The direct impacts of the VEE program have been measured already by program administrators in their Economic Analysis Report, Restaurant Survey Reports, Participant Survey Report, and other reports. We already know the amount of money invested by both the federal disaster relief authority and the State of Vermont, the number of meals distributed, the number of restaurants, farms, hubs, and other charitable organizations that participated in the meal distribution process, and how much was multiplied by investing in this program, among others. VEE distributed over 3.6 million meals between August 2020 and March 2023, with 25000 meals being distributed weekly (VEE Economic Analysis, 2023), leveraging more than \$46 million in federal COVID-19 relief funding (JSI, 2020; Massie & Heiss, 2025; Schuster & Klieger, 2023; VEE Economic Analysis, 2023; VEE Participant Survey Report 2023). Over \$34 million in revenue was generated by participating restaurants and more than \$3.5 million for local farmers and food

producers (JSI, 2020; Schuster & Klieger, 2023; VEE Economic Analysis, 2023). The program engaged 321 restaurants, with 211 still active at the program's conclusion. Restaurants were paid \$10 per meal, providing them with a crucial revenue stream during the pandemic (JSI, 2020; Massie & Heiss, 2025; Schuster & Klieger, 2023; VEE Economic Analysis, 2023).

VEE required that at least 10% of meal ingredients be sourced locally. Over 260 farmers participated, with 35% of meal ingredients coming from Vermont farms (JSI, 2020; Schuster & Klieger, 2023; VEE Economic Analysis, 2023) providing huge support to local agriculture. VEE's impact extended far beyond its food security goals. With an economic multiplier effect of \$78 million, \$10.1 million in private investment by restaurants, farms, and food producers, improved economic resilience which retained over 400 full-time employees, the establishment of new partnerships between farmers and restaurants, and enhanced community cohesion among others, the successes of the program can only go on (VEE Economic Analysis, 2023).

More research is needed to understand the indirect effects of the VEE program that were beyond its direct measurable impacts. Based on this review of the literature related to emergency feeding programs, their measurement and the Multiplier Effect, and an analysis of 42 interviews conducted with VEE officials, I argue that the VEE leadership perceived the impact of the program on Vermont as more magnified and extending beyond the intended and reported directly measured impacts. VEE leadership perceived the economic impact of the program as far-reaching, potentially creating ripple effects throughout local economies. VEE's economic impact was perceived as far-reaching,

potentially creating ripple effects throughout local economies. As such, this research will focus on the indirect impacts of the program that are not easily measured quantitatively. These indirect impacts will be analyzed to show the effects, which even though could be far-reaching, they had on communities in Vermont.

Based on this review of the literature related to complex food systems challenges and the multiplier effect, my first research article examines the following research question:

- **Beyond the direct impacts, what indirect impacts did VEE leadership perceive the VEE feeding program having on Vermont communities?**

This article will be valuable to policymakers, emergency management professionals, food system researchers and emergency food response managers because complex, often intangible aspects of resilience that are difficult to quantify or commodify in traditional economic analyses of emergency response programs. It will provide insights into the limitations of purely economic metrics for evaluating the success of emergency response programs. By exploring what aspects of community resilience cannot be easily measured, the study can inform more holistic approaches to policy design and program evaluation.

1.3.2. Program Administration

Emergency response programs require careful administration to ensure effectiveness, especially during times of crisis. The federal disaster relief authority defines emergency management as the “the managerial function charged with creating the framework within which communities reduce vulnerability to hazards and cope with disasters” (FEMA, 2015). This definition involves a wide array of activities including

planning, preparedness, response and recovery, which calls for robust administrative structures and processes. To administer emergency response programs would involve multiple interconnected elements that would include strategic planning, resource allocation, personnel management and coordination across all the stakeholders involved. A systems approach that integrates multiple disciplines, agencies and organizations is required to achieve effective emergency management (Bullock et al., 2017), demanding skilled administration in navigating the web of complex relationships, regulations, and resources for emergency preparedness and response. Administrators must be flexible and adapt their approaches, constantly refine and update their plans based on new information, changing risks and lessons gathered from the past (McEntire, 2021).

Administrative burden is a concept that encompasses the challenges and complexities individuals encounter when interacting with administrative systems, such as bureaucratic processes, regulations, and paperwork. This burden can impede efficiency, decision-making, and overall effectiveness within organizations. Niskanen (1971) initially proposed the theory of administrative burden, emphasizing how excessive administrative requirements can hinder organizational performance. Building on this foundation, Maynard-Moody and Musheno (2022) further explored the implications of administrative burden, highlighting its detrimental effects on workflow optimization and decision-making processes. One needs to understand and be able to mitigate administrative burdens in order to optimize workflow, promote efficiency, and improve organizational performance.

In recent times, research has continued to delve into the concept of administrative burden, shedding light on its contemporary relevance and implications for organizational management. Malik et al. (2025) in their research on the Australian healthcare sector show the importance of organizational sensemaking in efforts to achieve effective responses to organizational change as being crucial for realizing digitally enabled strategic agility. Maitlis and Christianson (2014) explored how administrative burdens affect nonprofit organizations, leading to resource constraints and operational challenges, suggesting ways to alleviate administrative burdens and enhance organizational effectiveness. Heinrich (2016) also investigated the strategies employed by organizations to navigate bureaucratic red tape and reduce administrative burden and offered insights into best practices for optimizing workflow and decision-making processes.

In recent years, research on program administration and administrative burdens within the food system and emergency response space has gained traction, especially in the light of the challenges that came to bear during the COVID-19 pandemic. Moynihan et al. (2015) wrote about individuals' experiences of program administration been "onerous", which could have a significant impact on the effectiveness of food assistance and emergency response programs. Studies in the food systems context have shown that administrative burdens can create barriers to access for vulnerable populations and reduce the program's efficiency (Herd & Moynihan, 2018; Herd et al., 2023).

Further research is needed to examine the administrative aspects of food system programs, especially the ones rolled out during times of emergency. Béland et al. (2021) highlighted the need for studies that looked at how the delivery of food assistance during

crises like the COVID-19 pandemic could be affected by administrative process. Focusing on the certainties and uncertainties surrounding the funding and administrative aspects of VEE, this thesis addresses the gap by examining how innovative program design and administration can potentially reduce burdens and improve outcomes. This research is principally important as it can inform policy design and implementation, potentially leading to more effective and equitable food assistance programs. As Herd et al. (2023) and Herd and Moynihan 2018 argue, understanding and reducing administrative burdens is important for improving social equity and program effectiveness in public administration.

1.3.2.1. Shifting Conditions and Guidance

In dynamic environments where conditions are constantly changing, leaders and workers must adapt to new circumstances and evolving challenges. The concept of adaptive leadership, introduced by Heifetz and Linsky (2017), underscores the significance of leaders in providing guidance and support to navigate uncertainty and evolving challenges. This leadership approach goes beyond traditional hierarchical models by emphasizing the mobilization of individuals to address complex problems, fostering innovation, and enhancing organizational resilience in the face of change. By encouraging adaptive behaviors and empowering individuals to respond effectively to shifting conditions, leaders can steer their organizations toward success in turbulent times.

Recent literature has further explored the concept of adaptive leadership in the context of contemporary challenges and dynamic environments. Studies have highlighted the role of adaptive leaders in promoting organizational agility and facilitating rapid

responses to changing conditions (Heifetz et al., 2009; Uhl-Bien & Arena, 2018; Yukl & Mahsud, 2010). Castillo and Trinh (2019) delved into the strategies employed by adaptive leaders to navigate uncertainty and drive innovation within their organizations, showcasing the positive impact of adaptive leadership on organizational performance and adaptability. Moreover, in today's fast-paced and unpredictable business landscape, the need for adaptive leadership has become increasingly pronounced. Scholars like Sott and Bender (2025) have emphasized the importance of leaders being agile and responsive to shifting conditions, advocating for a proactive approach to change management. By embracing adaptive leadership principles and fostering a culture of continuous learning and adaptation, organizations can position themselves to thrive amidst uncertainty and leverage change as an opportunity for growth and development.

Adaptive leadership has been explored to some extent in the food system and emergency response space, even though there is still significant room to further research it and apply it. In addressing complex challenges in the food systems space such as food security, sustainability, and resilience amidst climate change and other disruptions to food system, adaptive leadership approaches have been recognized as crucial. Dentoni et al. (2018) for instance highlighted the importance of adaptive leadership in fostering multi-stakeholder partnership in tackling wicked problems in food systems. Similarly in emergency response, adaptive leadership has been found to be a key component for effective crisis management. Adaptive leadership is essential for navigating the uncertainties and rapidly changing conditions that are a characteristic of emergency situations (Boin & Hart, 2003).

There is however a notable gap in the research that specifically examines adaptive leadership in the context of emergency food systems response, such as the VEE program. This thesis tries to close that gap by exploring how adaptive leadership was applied in the design, planning and implementation, potentially offering valuable insights for future emergency food assistance programs. As emphasized by Heifetz et al. (2009), adaptive leadership is important when addressing complex challenges that require learning, innovation, and stakeholder collaboration, all of which are highly relevant to emergency food system responses. This thesis will provide practical insights for policymakers and program administrators on how to leverage adaptive leadership to craft more responsive and effective emergency food assistance programs in the future.

1.3.2.2. Navigating Uncertainties

This next section focuses on navigating uncertainties using a program management lens. Navigating uncertainty is a fundamental aspect of decision-making and problem-solving during and outside of crisis. Several theoretical frameworks help to understand how organizations make sense of, make decisions amidst uncertainty.

Sensemaking

Weick (1995)'s concept of sensemaking provides a valuable framework for understanding how individuals and organizations make sense of ambiguous situations and navigate through uncertain situations. Sensemaking involves the process of creating coherence and meaning out of chaos by interpreting environmental cues, identifying patterns, and developing responses to unpredictable events. This cognitive process enables individuals to make sense of complex and uncertain situations, ultimately guiding their actions and decisions in the face of ambiguity.

Recent literature has further explored the concept of sensemaking in the context of contemporary challenges and dynamic environments. Scholars have highlighted the importance of sensemaking as a strategic tool for leaders and organizations to manage uncertainty effectively. Maitlis and Christianson (2014) examined the role of sensemaking in organizational resilience, showing how sensemaking processes can enhance adaptability and decision-making in turbulent times. By engaging in sensemaking activities, individuals and organizations can better understand the implications of uncertainty and proactively respond to changing circumstances.

Moreover, in today's rapidly evolving and unpredictable space, the ability to navigate uncertainty through sensemaking has become increasingly crucial. Malik et al. (2025) have underscored the significance of sensemaking in fostering innovation and strategic agility within organizations facing uncertainty. By leveraging sensemaking processes to decode complex and ambiguous situations, leaders can gain valuable insights, identify emerging trends, and make informed decisions that drive organizational success in uncertain times. Embracing sensemaking as a core competency can empower individuals and organizations to thrive amidst uncertainty and leverage ambiguity as a catalyst for growth and innovation.

Sensemaking in the context of emergency in food systems involves interpreting complex, rapidly changing situations to guide decision making and action. VEE program response to the COVID-19 pandemic is one compelling example of this process. VEE leaders had to quickly make sense of the interconnected challenges facing restaurants, farmers, and food-insecure populations in Vermont during the crisis (Massie & Heiss,

2025). Through a systems lens, they interpreted these challenges, recognizing the potential for a solution that could simultaneously address economic, agricultural, and food security issues. This sensemaking process led to the innovative design of VEE, which leveraged local restaurants to provide meals for those in need while also supporting local agriculture. The program's success demonstrates how effective sensemaking in emergency contexts can lead to solutions that address multiple systemic challenges simultaneously. Massie and Heiss (2025) also highlight how the ongoing sensemaking process throughout VEE's implementation allowed for adaptive management and continuous improvement of the program in response to evolving pandemic conditions.

1.3.3. Decision Making under Certainty and Uncertainty

Kale et al. (2019) define decision-making under uncertainty as one that is characterized by feelings of doubt and conflicts of interest which results in a block or delay in making choices between alternative courses of action. Broadly, uncertainty is defined with terms like imprecision, incompleteness, unreliability, ambiguity, errors, and subjectivity, among others. In the Cynefin Framework, Snowden and Boone (2007) use the levels of uncertainty to categorize situations into 'obvious', 'complicated', 'complex', and 'chaotic'. Due to the doubt, discomforts, and all the other negative feelings associated with uncertainty, it triggers the increased engagement of our cognitive abilities to resolve ambiguity. Certainty on the other hand is defined to depict situations where there are known and predictable causes and effects of actions. It is often associated with ease, security, comfort, stability, and a reliance on rules that are already established or

even best practices. In the Cynefin Framework, it is described as ‘obvious’ or ‘simple’ domain, as the relationship between the cause of an action and its effect or outcomes are understood easily.

The certainty or uncertainty of a situation would influence the behavior and performance of individuals facing those situations. Positively, certainty affords individuals to rely on established and proven procedures, routines, expertise, and solutions, which leads to faster decision-making and enhanced efficiency. The Kruger-Dunning effect suggests otherwise if overconfidence, oversimplification, or complacency sets in. This is the situation where the existence of certainty in situations can lead to moments of error when an unexpected complexity occurs (Kruger & Dunning, 1999). Uncertainty on the other hand is seen to stimulate the individual to a point of deeply engaging their cognitive ability to solve problems systematically and innovatively. This is also true in the Cynefin framework where complex and chaotic situations encourage experimentation and adaptive learning (Snowden & Boone, 2007). On the other hand, too much uncertainty without measures to tackle it could lead to stress, anxiety, and an inability to make decisions due to the fear of making the wrong decision.

In the face of uncertainty, individuals are predicted to engage in information gathering where they actively try to seek out more data to better understand the situation and reduce the levels of uncertainty (Grupe & Nitschke, 2013; Liu et al., 2016; Perrykkad et al., 2021; Vives & FeldmanHall, 2018; Wang et al., 2024). Some also engage in risk aversion, where they choose options that they perceive to come with lesser negative outcomes. Other individuals may choose to procrastinate. In this case, they delay the

decisions or actions to take due to the discomforts associated with the uncertainty. Others may seek reassurance from other individuals, increase their vigilance to observe situations, and face difficulties in making decisions (Grupe & Nitschke, 2013; Liu et al., 2016; Perrykkad et al., 2021; Vives & FeldmanHall, 2018; Wang et al., 2024). Even though uncertainty is associated with high levels of stress and anxiety, it leads to more innovative problem-solving approaches as individuals engage in more thoughtful processes to reduce uncertainty. Certainty, impacts how people think and act in the present, adapt their behavior, or plan for the future (Okten et al., 2022). Okten et al. (2022) found certainty to breed poor information-seeking and antisocial tendencies or behaviors. The overreliance on certainty causes people to become risk-averse to the point that when they need to take risks, they prefer to be in their comfort zones.

1.3.3.1. Known/Unknown Uncertainties

Uncertainties by nature suggest that something is unknown or unknowable. However, the uncertainties themselves can be knowable. During a crisis for example, a community may know that they should be concerned about addressing the unknown risk of disease spreading before it happens. This is a proactive approach to managing risks and is crucial for emergencies preparedness and response. Anticipating potential threats and preparing for them is one key aspect of crisis leadership (Boin & Hart, 2003). Communities that engage in pre-crisis planning and risk assessment are better equipped to respond or face emergencies when they occur. This is also echoed by Kapucu and Van Wart (2006), as they emphasize the importance of community engagement and collaborative networks in addressing unknown risks during crises. Known uncertainties and unknown uncertainties represent distinct categories of risks and challenges that

organizations encounter in their decision-making processes. Known uncertainties are those risks that are identifiable, understood, and can be planned for based on existing knowledge and information. In contrast, unknown uncertainties encompass unforeseen or unpredictable factors that may have significant impacts on outcomes but are not easily recognized or anticipated.

Known uncertainties are those risks that can be identified and analyzed to some degree, while unknown uncertainties are those unforeseen events or “unknown unknowns” that are difficult or impossible to anticipate. This distinction is necessary for risk management and strategic planning as it affects how organizations approach decision-making within the ever-changing uncertain environments. Taleb (2007) takes it further by introducing the term “black swan”, which he uses to describe highly probable events with extreme impact that are only explainable in hindsight. These events fall into the category of unknown uncertainties and thus pose significant challenges for traditional risk assessment and decision-making models. To address both known uncertainties through rigorous analysis and unknown uncertainties, organizations must develop strategies through increased adaptability and resilience.

The Cynefin framework, introduced by Snowden and Boone (2007), offered a comprehensive model for classifying uncertainties into known-knowns, known-unknowns, unknown-knowns, and unknown-unknowns, providing a structured approach for organizations to navigate complex decision-making landscapes. This framework provides a structured approach for understanding different types of uncertainties and guiding decision-making strategies based on the level of predictability and complexity

involved. Snowden and Boone (2007)'s Cynefin framework offers a comprehensive model for classifying situations into different domains of complexity, providing a structured approach for organizations to navigate complex decision-making landscapes. Béné (2020) describes the disruptions caused by the pandemic as unpredictable and requiring adaptive responses. The COVID-19 pandemic's impact on food supply chains was a complex situation. Food system actors had to probe, sense, and respond to rapidly changing conditions, such as shifting consumer demands and supply chain disruptions. As such, successful implementations of food safety measures would require coordinated efforts from multiple stakeholders and careful analysis of local contexts (Miller & Engemann, 2019; WHO and FAO, 2020)

One chaotic situation in the context of emergency response is the immediate aftermath of a natural disaster that affects food distribution systems. In such cases, the Cynefin framework suggests that leaders should act first to establish order, then sense and respond. It is important to regularly reassess the situation, as contexts that seem simple can quickly become complex or chaotic (Snowden & Boone, 2007). This aligns with the findings of Comes and Van de Walle (2015) and Mottahedi et al. (2021), who emphasize the importance of rapid decision-making and flexibility in the early stages of disaster response. The Cynefin framework can be applied to understand and respond to various situations in food systems and emergency response, helping decision-makers choose appropriate strategies based on the level of complexity they face.

In more recent times, others have further explored the implications of known and unknown uncertainties in the context of organizational decision-making and risk

management, emphasizing the importance of distinguishing between known and unknown uncertainties to develop effective strategies for mitigating risks and enhancing organizational resilience. Heinrich (2016) delved into the role of scenario planning in addressing unknown uncertainties, highlighting how organizations can use scenario analysis to prepare for unforeseen events and build adaptive capacities in volatile environments. By acknowledging the presence of unknown uncertainties and incorporating them into decision-making processes, organizations can enhance their ability to respond proactively to unexpected challenges and disruptions.

Because of their importance to effective decision-making and sense-making, ability to navigate known and unknown uncertainties has become a critical competency for organizational leaders. Khan et al. (2018) underscored the significance of embracing uncertainty and complexity in decision-making, advocating for a dynamic and adaptive approach to managing risks and uncertainties. By leveraging the insights provided by the Cynefin framework (Snowden & Boone, 2007), organizational leaders can better understand the nature of uncertainties they face, develop robust risk management strategies, and foster a culture of agility and innovation to thrive in uncertain environments. Embracing known and unknown uncertainties as inherent aspects of decision-making can empower organizations to anticipate challenges, seize opportunities, and navigate complexity with confidence and resilience.

VEE demonstrates how embracing uncertainties could lead to innovative solutions. Massie and Heiss (2025) described how program leaders of VEE faced numerous known uncertainties (e.g. duration of the pandemic, changing federal funding

structures) and unknown uncertainties (e.g. long-term impacts on food systems, evolving community needs). VEE was able to adapt quickly to changing circumstances by acknowledging these uncertainties and building flexibility into the program's design. Food system actors are increasingly embracing both known and unknown uncertainties to build resilience in the face of climate change. According to Tendall et al. (2015), this involves anticipating potential disruptions (known uncertainties) while also preparing for unforeseen challenges (unknown uncertainties). For example, some farmers are diversifying their crops to mitigate known risks associated with changing weather patterns. Simultaneously, they are investing in adaptive capacities, such as improved water management systems and soil health, to better respond to unknown future climate impacts. This approach of embracing uncertainties has led to the development of more robust and flexible food production systems that can better withstand a range of potential disruptions and calls for innovative approaches to emergency response, including in the realm of food assistance. Research examining programs like Vermont Everyone Eats can contribute valuable insights navigating certainties and uncertainties associated with emergency food response management. More research is needed to understand how communities are impacted and respond to these funding uncertainties during times of crisis (Moore et al., 2023; Windon & Hales, 2022).

1.3.4. Resilience in the Face of Certainties and Uncertainties

Resilience has become a growing topic of interest for researchers in diverse fields. Resilience is a process of navigating shocks through an ongoing management of capabilities within a community (Copeland et al., 2020). Resilience, the ability to adapt to

challenges, encompasses the ability of a social system to recover from disasters or shocks. According to Buzzanell (2010), resilience is the ability to bounce back or be reintegrated after difficult life experiences. She emphasizes that resilience is not only about bouncing back but creating a new normal or reality through communication, interaction, and material considerations. The shocks and disruptions that communities face are uncertainties, both known and unknown, that disrupt the normalcies that these communities are familiar with. Due to the complexity and limited control one has on disruptions of systems, it is important that the resilience efforts of communities to adjust and adapt to changes becomes a multidimensional continued effort. Snowden and Boone (2007) through their Cynefin Framework suggest that resilience is fostered in uncertain and complex situations through experiments, collective learning, and adaptive strategies (Snowden & Boone, 2007).

Resilience can be enhanced under uncertainty when proactive problem-solving is encouraged through positive coping styles (Miller & Engemann, 2019). Certainty on the other hand gives foundation to resilience through the creation of predictable structures that allow for effective and efficient responses when things are stable (Kapucu & Van Wart, 2006; Miller & Engemann, 2019). Miller and Engemann, 2019 and Kapucu and Van Wart (2006) both emphasize how important adaptive strategies are in building resilience in the face of uncertain events. Balancing and effectively managing the interplay between certainty and uncertainty promotes immediate and long-term stability and adaptability.

1.3.5. Cynefin Framework

Certainties are the events or situations that are very likely to take place. It is a state of being completely confident that an event will happen. Uncertainty on the other hand are the events and situations for which we are unsure about the likelihood of the event occurring. Uncertainty is a state of limited knowledge, which results in the inability to tell the current state of things. The Cynefin framework, introduced by Snowden and Boone (2007), offers a comprehensive model for classifying uncertainties into known-knowns, known-unknowns, unknown-knowns, and unknown-unknowns, providing a structured approach for organizations to navigate complex decision-making landscapes. Thus, this paper will dwell on the framework to analyze the data and show how resilience was achieved by the organizers of the VEE program. The data will be sorted into the various domains of the Cynefin framework.

The framework has five domains: clear, complicated, complex, chaotic, and a center of confusion/disorder. For ‘complex’ and ‘chaotic’, cause and effect are not known and cannot be discovered. Rather, we can try and deduce them only in hindsight, after the effect has happened. For ‘clear’ and ‘complicated’, we know the cause and effect or can discover them. The ‘clear’ domain is the “known knowns. It is characterized by best practices or rules in place, stable situations, and a clear cause and effect relationship. Here, you “sense (establish the facts), categorize, and respond” by applying best practices. Decision-making lies in the realm of reason. One must make sure they do not become complacent or oversimplify the situation.

The ‘complicated’ domains are made up of the known unknowns. With this, there is the need for expertise or analysis to be able to tell the cause-and-effect relationship of

such situations. The rule is to “sense (assess the facts), analyze and respond by applying good operating practice. The ‘complex domain in the framework is characterized by “unknown unknowns”. There are no right or wrong answers here, and cause and effect relationships can only be told in hindsight or retrospectively. The rule is to “probe, sense and respond”. The ‘chaotic domain of the framework events are too confusing to wait for a knowledge-based response. The rule is to “act, sense and respond”. Any action at all is the go-to answer before one tries to process the situation and respond to it. The ‘confusion’ domain at the center of the framework is a point where it is uncertain which of the domains apply.

Based on the Cynefin framework (Snowden & Boone, 2007) and other relevant literature (Copeland et al., 2020; Grupe & Nitschke, 2013; Kapucu & Van Wart, 2006; Vives & FeldmanHall, 2018; Okten et al., 2022; Perrykkad et al., 2021; Miller & Engemann, 2019; Wang et al., 2024), I have sorted out the outcome/effect/organizational behavior in the face of certainties and uncertainties into positive and negative components, and their effect on resilience in the conceptual model in **Figure 1**.

My second research article draws on a public administration framework to examine adaptive leadership during times of known and unknown uncertainties associated with a crisis. The paper tries to find out how federal emergency funding creates conditions of certainty and uncertainty during emergency response program design and implementation. **I ask,**

- **Beyond providing funding, what impacts did the VEE Leadership perceive federal disaster response funding structure as having on the design and delivery of the VEE emergency feeding program?**
- **How do organizations involved in the design processes navigate and respond to those certainties and uncertainties in their decision-making processes and the implementation of the program?**

To examine these research questions, the paper looks at how leaders of a federal emergency funded state-wide COVID-19 response program, Vermont Everyone Eats (VEE), anticipated and responded to varying degrees of certainties and uncertainties associated with the pandemic and federal emergency funding.

CHAPTER 2: METHODS

2.1. Research Design

This study employed a qualitative research design to understand how the certainties and uncertainties surrounding federal disaster funding impacted a state food response program aimed at reducing hunger and boosting the local economy, and the perceived indirect impacts of VEE on the state of Vermont from the perspectives of the program administrators and implementers. Qualitative research is a method of inquiry that focuses on understanding human experiences, behaviors, and interactions in their natural settings. It is characterized by its emphasis on exploring the depth and complexity of phenomena through the collection and analysis of narrative data (Creswell & Poth, 2016). Qualitative research involves the studied use and collection of a variety of empirical materials – case study, personal experience, introspective, life story, interview, observational, historical, interactional, and visual texts – that describe routine and problematic moments and meanings in individuals’ lives (Denzin & Lincoln, 1994). This approach is particularly effective for uncovering rich, detailed insights and generating a comprehensive understanding of specific contexts, making it ideal for examining social programs such as the Vermont Everyone Eats (VEE) program. This approach was chosen to capture the diverse perspectives and experiences of participants involved in the program, including state officials, beneficiaries, organizers, and other stakeholders.

2.1.1. Participants

After obtaining human subject research approval, participants for the study were selected from across several organizations and individuals who were engaged in the

administration, coordination and implementation of VEE, with varying levels of engagement in the program. They included community leaders, disaster response coordinators, local government officials, NGO representatives, and community members, among others. Specifically, participants for this study are state government officials, Southeastern Vermont Community Action (SEVCA) Administrators, members of the Taskforce, and Hub officials. All the people who had had a role to play in the planning, organizing and implementation of VEE were included in the pool of potential interviewees. We obtained a list of Hub and Hub directors which was made public on the VEE website and emailed those individuals. These participants were contacted via an email, inviting them to show their interest in being interviewed by filling a survey, and scheduling a time to be interviewed.

The interviews were conducted on Microsoft Teams, which allowed for recording and transcribing of the interviews. Due to varying reasons including interest and availability to be interviewed, only those that replied to the emails in the affirmative were contacted for the 45-60 minutes interviews. Thirty-two (32) of them agreed to interview with us, of which some of them participated in more than one (1) round of interviews, making a total of 42 interviews. Some of the participants participated in various rounds of the semi structured Interviews. There were three rounds of semi structured interviews. Some of the participants participated in only one round, with others participating in more than 1 round. **Table 1** shows the list of participants with their regional, organizational and sectoral affiliations, as well as VEE affiliation and rounds of interview participated in.

2.1.2. Recruitment

These participants were contacted via email, inviting them to show their interest in being interviewed by filling out a survey and scheduling a time to be interviewed. Due to varying reasons including interest and availability to be interviewed, only those who replied to the emails in the affirmative were contacted for the 45-60-minute interviews. Some of the participants participated in various rounds of the semi-structured Interviews. There were three rounds of semi-structured interviews. Some of the participants participated in only one round, with others participating in more than 1 round.

2.1.3. Data Collection Method

The primary method of data collection involved conducting semi-structured interviews with key stakeholders within the operation of VEE. Semi structured interviews were conducted to gather the lessons that were learned from the VEE program. According to Bernard (2017), semi-structured interviews are a qualitative research method where the interviewer follows a predetermined set of questions but is also free to explore additional topics that emerge during the conversation. This method allows for a flexible and in-depth exploration of participants' experiences and perspectives, providing rich, qualitative data that is crucial for understanding complex issues. It allows for other follow-up questions to emerge from the interview, aside from the planned follow-up questions of the interview. These semi-structured interviews were instrumental in uncovering nuanced insights into the program's implementation and outcomes while ensuring that key topics were covered consistently across all interviews. The interviews were conducted on Microsoft Teams, which allowed for recording and transcribing of the interviews. There were three rounds of semi-structured interviews. Some of the

participants participated in only one round, with others participating in more than 1 round. For anonymity, participants have been given pseudonyms.

2.1.3. Data Analysis

The qualitative data collected from the semi- structured interviews went under thematic analysis. The data was then coded and categorized using NVivo 14 software, a qualitative data analysis software to facilitate a systematic analysis of the data. This process involves identifying patterns, themes, and categories within and across the data (Braun & Clarke, 2006; Clarke & Braun 2017; Owen, 1984, 1985). To qualitatively analyze the data, NVivo 14 was used. From the NVivo software, I used the Import menu to import the Teams Transcript files from the folder I created for them on my computer to the software. I then read through the uploaded files on NVivo to familiarize myself with the data (Braun, & Clarke, 2006) at which point I was making notes too.

Once I open a transcript file, I read through each line of the conversation and assign codes to the sentence, paragraph, or parts of the paragraph. From the Create menu, you can create new codes and assign them names and colors. While reading the text files, you can directly highlight the thoughts or ideas in the transcript to a code. I used this option, coding as I go, and allowing the codes to emerge. Here, I select the relevant text that corresponds to the idea, theme, or name I want to assign to it and create the code. If my brain registers that the code name I want to assign the selected text to exists already, I code the selected text to existing codes rather than new codes. Codes were allowed to emerge from the data, within and across transcripts. The data was then categorized with the aid of hierarchical coding or coding trees to help identify and generate initial themes

across data points. The initial themes were then shuffled around several times until major and forceful repeating and reoccurring categories evolved that could address the research question (Braun, & Clarke, 2006; Owen, 1984, 1985). In the analysis, quotations from both Hub and Taskforce participants are included to honor the voices of the interviewees.

**CHAPTER 3: THE MULTIPLIER EFFECT IN ACTION: PERCEIVED
INDIRECT IMPACTS OF INNOVATIVE EMERGENCY FEEDING
PROGRAMMING ON COMMUNITIES**

3.1. Introduction

The COVID-19 pandemic amplified or magnified several interconnected slow-crises, including hunger, housing, vulnerable food supply chain, and job insecurity. When lockdowns and economic slumps unfolded, vulnerable populations experienced increased difficulties and challenges in accessing essential resources for their survival, leading to increased social and slow crises. The COVID-19 pandemic (March 11, 2020 – May 05, 2023 (Centers for Disease Control and Prevention [CDC], 2024; World Health Organization [WHO] 2024;)) revealed known and unknown systemic inequalities and vulnerabilities that had shrouded societies across the globe.

The United Nations reported that the pandemic could push an additional 83 million to 132 million people into chronic hunger by the end of 2020 (FAO et al., 2020). In 2022, the FAO reported that the global hunger numbers rose to 828 million, which was 150 million higher than pre-pandemic times. FAO et al. (2024) revealed that in 2023, between 713 and 757 million people, which corresponds to 8.9% and 9.4% of the global population may have faced hunger, 152 million above the numbers in 2019. On the national scale in the United States of America, rates of food insecurity increased from 10.5% in 2019 to 13.8% in 2020 (Coleman-Jensen et al., 2019). Niles et al. (2020) in their research in Vermont found that rates of food insecurity had nearly doubled from

18.3% to 32.3% during the first few months of the pandemic (McCarthy et al., 2022; Niles et al., 2020).

Closely interconnected with this surge in food insecurity were other social issues worsened by the pandemic, such as unemployment, poverty, and health disparities. These challenges were disproportionately experienced by low-income households and communities of color (Christensen & Læg Reid, 2020; Head & Alford, 2015). Hunger and job insecurity were interconnected. For example, when people lost their jobs during the pandemic, it led to increased poverty, which also led to food insecurity and mental health challenges (Moon, 2020). School closures disrupted education, as well as access to school meals for many children, further increasing food insecurity for vulnerable families (Niles et al., 2020; Peters, 2017). Perpetuating the challenges of hunger and job insecurity, extreme disruptions to supply chains caused widespread unemployment, which ended up putting strains on social support systems.

Many interventions were made across the globe to mitigate the direct and indirect impacts of the pandemic. Among such interventions were food and hunger intervention programs. The Vermont Everyone Eats (VEE) is one such program, an emergency feeding program. Programs have both intended and unintended consequences, which can be both positive and negative. It is well documented that emergency response programs can have desirable and undesirable consequences on the short- and long-term resilience of communities and food systems. According to Sawyer (2017), emergency response programs that support local producers and distributors can strengthen these systems and enhance long-term community resilience.

There is evidence that the VEE funds were amplified through a "three-legged stool" approach; supporting local restaurants, and food producers, and addressing food insecurity simultaneously (Vermont Everyone Eats [VEE] Economic Analysis, 2023). According to Buzzanell (2010) and Houston et al. (2015), these social and resilience assets would serve to make the state more resilient during the pandemic and moving forward. It is impossible to account for the multiplication of those dollars from this social and resilience asset standpoint using traditional economic models. The VEE program fostered a sense of community, collaboration, and resilience that extended beyond the immediate financial impacts. The funding enabled the development of new networks, knowledge sharing, and the establishment of norms that prioritized collective well-being and support for local businesses and vulnerable populations. These intangible benefits contribute to building long-term resilience within communities, enhancing their ability to withstand and recover from future crises. While challenging to quantify, the perceived societal impacts of the VEE program's funding highlight the need for a more holistic understanding of the multiplier effect, one that considers not only the economic ripple effects but also the potential for fostering resilience, social cohesion, and community empowerment. **This paper argues that the relief money from the VEE program was multiplied in ways that cannot be fully accounted for within a capitalistic model, as the multiplier ends when the initial flow of money ends. Drawing on an analysis of 42 interviews with VEE leadership, the program multiplied relief money to develop a statewide identity, new norms, and new networks that are lasting and more durable benefits of the program, which are**

difficult to quantify financially. I ask, beyond the direct impacts, what indirect impacts did VEE leadership perceive the VEE feeding program as having on Vermont communities?

3.2. Literature Review

3.2.1. Vermont Everyone Eats, a COVID-19 Response

Vermont Everyone Eats (VEE) is a notable emergency feeding program that responded to a set of complex challenges posed by the COVID-19 pandemic. Launched on August 1, 2020, through March 31, 2023, (VEE Economic Analysis, 2023) VEE was an emergency program designed to address food insecurity while simultaneously addressing economic development and local agriculture issues. The VEE program was funded by the state of Vermont and the federal disaster response authority (VEE Economic Analysis, 2023). VEE distributed over 3.6 million meals between August 2020 and March 2023, leveraging more than \$46 million in federal COVID-19 relief funding (Massie & Heiss, 2025; VEE Economic Analysis, 2023).

VEE was a multifaceted emergency feeding program addressing food insecurity, economic development, and local agriculture in Vermont (VEE Economic Analysis, 2023). The program provided nutritious prepared meals to Vermonters in need and simultaneously boosted the local economy by keeping local restaurants, food producers, and farmers who were impacted by the economic disruptions caused by the pandemic in business (VEE Economic Analysis, 2023). This innovative program not only addressed immediate food needs but also fostered community resilience and collaboration during a time of crisis. Against the backdrop of the pandemic, the VEE program played a crucial

role in mitigating the effects of food insecurity and economic instability in Vermont. By leveraging federal funding through the Coronavirus Relief Fund, and support from the State of Vermont, the program facilitated the distribution of locally sourced meals to individuals and families facing challenges related to access to food. The VEE program not only served as a lifeline for those in need but also contributed to the sustainability of Vermont's agricultural sector by creating a market for local producers and food establishments.

VEE operated using a unique cross-sector approach which engaged local restaurants to prepare meals with locally sourced ingredients for Vermonters who were experiencing food insecurity or found it harder to get food due to the COVID- 19 pandemic. Beneficiaries of the program did not need to show proof of need to be able to access the program. Southeastern Vermont Community Action (SEVCA), the main administrative body and the program's statewide grantee, guided the formation of a Statewide Task Force, which comprised of representatives from various agricultural and economic development agencies and boards, hunger relief organizations, and restaurants. (VEE Economic Analysis, 2023). Members of the statewide Task Force bring into the program their extensive experience with food insecurity programs, government agencies economic development agencies, and restaurant engagement to strategically guide the program (VEE Economic Analysis, 2023). There were fourteen Community Hubs across the state of Vermont that coordinated the production and distribution of meals at the community and local levels (Massie & Heiss, 2025; VEE Economic Analysis,

2023). This collaborative governance structure allowed for adaptive management and social learning, crucial for addressing complex systemic issues (Massie & Heiss, 2025).

VEE's impact extended far beyond its food security goals. With an economic multiplier effect of \$78 million, \$10.1 million in private investment by restaurants, farms, and food producers, improved economic resilience which retained over 400 full-time employees, the establishment of new partnerships between farmers and restaurants, and enhanced community cohesion among others, the successes of the program can only go on (VEE Economic Analysis, 2023). VEE's successes demonstrate how effective a collaborative integrative approach to addressing (Massie & Heiss, 2025) complex societal issues like food insecurity can be. Following the program in March 2023, many other local initiatives have been inspired to continue in similar efforts using VEE's innovative model.

As an emergency response program, VEE stands out compared to other food programs due to how it uniquely and innovatively addresses food insecurity together with supporting local economies (VEE Economic Analysis, 2023). In its design and implementation, VEE was designed to support individuals facing food insecurity, local restaurants, and farmers in Vermont. Over \$34 million in revenue was generated by participating restaurants and more than \$3.5 million for local farmers and food producers (VEE Economic Analysis, 2023). VEE was a community-based implementation program. Hubs across all 14 counties in the state of Vermont were put in charge of the day-to-day running of the program. These hubs were managed by people from diverse organizations, including farm-to-table initiatives, downtown resiliency groups, recovery support

programs, food security advocates, and community action agencies. The hubs coordinated relationships between local restaurants, farmers, community organizations, and meal distribution partners to source, produce, and deliver meals to those in need (VEE Economic Analysis, 2023). Through the oversight of the hubs, restaurant-quality meals were distributed to Vermonters facing food insecurity at the time, which not only addressed nutritional needs but also offered a sense of dignity and normalcy to recipients. The program created a multiplier effect that stimulated additional economic activities beyond the initial investments, which was crucial during a time when many businesses faced various forms of financial uncertainty and closures. Even though a temporal emergency measure of addressing food insecurity during a time of the COVID-19 pandemic, VEE brought to light the gaps in the existing food security system and demonstrated the potential for collaborative cross-sector solutions (Massie & Heiss, 2025).

Meals were delivered to various locations including food shelves, community meal sites, schools, and senior centers (Massie & Heiss, 2025). VEE made use of digital platforms in its running. It utilized the Localvore App for efficient meal distribution coordination (VEE Economic Analysis, 2023). With this, customers and service recipients did not need to physically be present at restaurants or distribution centers to receive meals, they could access the meals program on the app through the comfort of their homes, which was very handy during the time of pandemic when it was important to limit the times one goes out into the public. VEE's target was to focus on reaching populations that experienced higher levels of food insecurity (Massie & Heiss, 2025).

Clients did not need to submit evidence or proof of their need before being allowed to access these meals. They used a unique self-certification or self-attestation process for showing eligibility for meals to reduce the stigma that was usually associated with charitable food systems (Massie & Heiss, 2025). In terms of community building, the program facilitated weekly meetings among hub managers and representatives of agencies, that fostered a community of practice (JSI, 2020) and created community connections and resilience (Massie & Heiss, 2025).

VEE distributed over 3.6 million meals between August 2020 and March 2023, with 25000 meals being distributed weekly (VEE Economic Analysis, 2023). The program engaged 321 restaurants, with 211 still active at the program's conclusion. Restaurants were paid \$10 per meal, providing them with a crucial revenue stream during the pandemic (Massie & Heiss, 2025). VEE required that at least 10% of meal ingredients be sourced locally. Over 260 farmers participated, with 35% of meal ingredients coming from Vermont farms (VEE Economic Analysis, 2023), providing huge support to local agriculture. The program leveraged more than \$46 million in federal COVID-19 relief funding. According to economist Elizabeth Schuster, VEE's multiplier effect catalyzed as much as \$66 million in additional local spending (VEE Economic Analysis, 2023). The meals provided were required to be of a nutritious balance, taking guidance from the USDA My Plate (VEE Economic Analysis, 2023). VEE operated through 14 community hubs across Vermont, managing relationships with local restaurants, farmers, community organizations, and meal distribution partners (VEE Economic Analysis, 2023). These locally governed community hubs assess the needs and resources that would be needed to

execute the program in their regions and connect directly with restaurants and meal beneficiaries.

The VEE program exemplified a collaborative and adaptive response to the multifaceted challenges brought about by the pandemic. Through partnerships with community organizations, restaurants, and food producers, the program demonstrated the power of collective action in addressing complex social issues. Through promoting food security, supporting local businesses, and fostering a sense of community companionship, the VEE program showcased the resilience and innovation of Vermont's response to the crisis, highlighting the importance of solidarity and cooperation in times of uncertainty.

3.2.2. Emergency Food Programs Impact Measurement

Various methods and approaches are being adopted by other researchers to evaluate the direct and indirect impact of emergency feeding programs. Both qualitative (especially interviews) and quantitative (especially surveys) methods have been used. Due to the complex nature of emergency feeding programs, diverse tools, and measurements are employed to assess their successes. In 2020, Jablonski et al. (2021) studied the emergency food provision in five cities in the U.S. during the Covid-19 pandemic. They conducted the research with participants who were providers of emergency food services and households that had K-12 children through interviews and focus groups. Cross-sector collaborations, adaptable supply chains, and addressing service gaps to increased-risk populations were some of the indicators of how effective a local emergency feeding program is. The qualitative approach used allowed for a more intricate understanding of local responses and challenges. Each school district and city

were making different decisions about their response to the emergency because the National School Lunch Program (NSLP) and the School Breakfast Program did not have clear guidelines about the role they play in supporting continued feeding programs. The study's generalizability is limited to other contexts as they rely on qualitative data for their study.

Emergency feeding programs can also use standardized survey questionnaires and food security indicators to conduct their study. One such tool is the Household Food Insecurity Access Scale (HFIAS) which was developed by the Food and Nutrition Assistance III Project. This tool has been used widely by many researchers in assessing the impact of food assistance programs (Coates et al., 2007). It provides a quantifiable measure of food insecurity and allows for comparing data across different periods and contexts. It may, however, not capture all the diverse food insecurity experiences and diverse cultural contexts (Frongillo & Nanama, 2006). Some other researchers combine both qualitative and quantitative methods and tools in assessing the effects of innovative emergency feeding programs. A systematic review of cash-based approaches to humanitarian emergencies was conducted by Doocy and Tappis (2017). Their review included studies that applied qualitatively analyzed program implementation challenges and studies of quantitative outcomes such as food consumption scores, providing a more holistic view of program impacts. This mixed method, however, can be time and resource consuming. Program impacts over time can be measured using longitudinal studies. A randomized controlled trial of food assistance modalities in Ecuador over two years was studied by Hidrobo et al. (2018). They were able to assess the short- and long-term

impact of food assistance programs on food security, dietary diversity, and other outcomes. This method, even though effective, is also fraught with resource intensiveness.

3.2.3. The Multiplier Effect

The multiplier effect is an important concept in macroeconomics that explains how an initial change in spending can lead to a larger change in aggregate economic activity. It is a crucial concept for understanding how changes in spending can have amplified impacts on the overall economy. As Samuelson and Nordhaus (2009) explain in their seminal economics textbook, "The multiplier effect refers to the magnification of an initial change in spending on the equilibrium level of national income" (Samuelson & Nordhaus, 2009, p. 446). The simple idea behind the multiplier effect is that when there's an injection of new spending into the economy, it creates a ripple effect. As Keynes (1936) originally proposed in his *General Theory*, "The multiplier tells us by how much the equilibrium level of income will change for a given change in the level of investment" (Keynes, 1936), p. 115). This initial spending becomes income for others, who then spend a portion of that income, creating income for yet others, and so on. The size of the multiplier depends on several factors, primarily the marginal propensity to consume (MPC). Mankiw (2024) defines MPC as "the fraction of an additional dollar of income that a consumer spends rather than saves" (Mankiw, 2024, p. 262), hence, the proportion of additional income that is spent rather than saved. The higher the MPC, the larger the multiplier effect will be. The basic formula for the multiplier is:

$$\text{Multiplier} = 1 / (1 - \text{MPC})$$

For example, if the MPC is 0.8, the multiplier would be $1 / (1 - 0.8) = 5$. This means that for each dollar of new spending, we could potentially generate \$5 of total economic activity. However, real-world multipliers are often smaller due to various "leakages" from the circular flow of income. As Krugman and Wells (2018) point out, "The actual multiplier is likely to be smaller than what the simple formula suggests because of leakages such as taxes, savings, and imports" (Krugman & Wells, 2018, p. 328). Empirical studies have tried to measure the size of multipliers in different contexts. For instance, Ramey (2011) conducted a comprehensive review of fiscal multiplier estimates and found that they typically range from 0.8 to 1.5 for government spending in the United States, depending on the specific circumstances and measurement techniques used. The multiplier effect has important implications for economic policy. As Stiglitz and Walsh (2006) note, "The multiplier effect is a key reason why changes in government spending or taxes can have such a large impact on the economy" (Stiglitz & Walsh, 2006, p. 412). This concept explains the use of fiscal policy as a tool for economic stabilization and growth. However, it's important to note that the effectiveness of policies based on the multiplier effect can vary. Auerbach and Gorodnichenko (2012) found that fiscal multipliers tend to be larger during recessions than during expansions, suggesting that the timing of fiscal interventions matters. The economic stimulus generated by the multiplier effect depends on the sustained investment and circulation of funds, hence, the multiplier effect ends when the initial flow of money ceases (Watson et al., 2007; Shideler & Watson, 2019). Hence, there may be more durable and lasting effects of economic

activities beyond the multiplier. While its basic principle is straightforward, its real-world application involves complex interactions within the economic system.

3.2.3.1 The Multiplier Effect in Food Systems and Emergency Response

In the context of food systems and emergency response programs, understanding the multiplier effect is crucial for assessing the full impact of interventions and investments, as it reflects how initial spending circulates through the economy.

Particularly, the multiplier effect can be significant due to the interconnected nature of production, processing, distribution, and consumption (Sawyer, 2017). Studies have shown that buying local food can have a multiplier effect of 1.4-2.6 throughout the wider local economy (Sustain Ontario, 2012). This means that for every dollar spent on local food, an additional \$0.40 to \$1.60 is generated in local economic activity. Research on farm-to-school initiatives has demonstrated multiplier effects ranging from 1.67 to 2.16, indicating that these programs benefit students and create significant economic impacts in local communities (Christensen et al., 2017). During the COVID-19 pandemic, emergency food assistance programs like Vermont Everyone Eats (VEE) demonstrated substantial multiplier effects. According to economist Elizabeth Schuster, VEE's multiplier effect catalyzed as much as \$78 million in additional local spending from an initial investment of \$49 million (Vermont Business Magazine, 2023; VEE Economic Analysis, 2023). Pender et al. (2019), Pender and Jo (2019), Canning and Stacy (2019), and Canning and Morrison (2019) at the USDA Economic Research Service estimates that every \$1 billion in SNAP benefits generates \$1.54 billion in Gross Domestic Product (GDP) during economic downturns, illustrating the powerful multiplier effect of food

assistance programs (Canning & Morrison, 2019; Canning & Stacy, 2019; Pender & Jo, 2019; Pender et al., 2019).

While the potential of the multiplier effect in food systems and emergency response has been demonstrated in research (Shuman & Hoffer, 2007; Sustain Ontario, 2012; Sustain Ontario, 2015; Swenson 2009), there is a need for more comprehensive and standardized research in this. There is a lack of standardized methods for calculating multiplier effects in food systems, making comparisons between studies and regions difficult (Benedek et al., 2020; Shideler & Watson, 2019). Most studies focus on short-term economic impacts. More research is needed on the long-term effects of food system interventions on local economies (Sawyer, 2017). Future research should examine how multiplier effects interact with social equity, environmental sustainability, and public health outcomes (Massie & Heiss, 2025). The unique dynamics of emergency response programs, such as their temporary nature and rapid implementation, require specialized study to fully understand their multiplier effects (Massie & Heiss, 2025).

The Vermont Everyone Eats program provides a compelling case study for examining the multiplier effect in emergency food response. VEE's innovative model, which supported local restaurants, farmers, and food-insecure individuals simultaneously, created a strong multiplier effect estimated at 2.6 (VEE Economic Analysis, 2023). This means that for every dollar spent on prepared meals, \$2.60 of economic activity was generated in the local economy. The program's success in leveraging federal funding to create widespread economic benefits while addressing food insecurity highlights the potential of well-designed emergency response programs to generate significant

multiplier effects. However, the full extent and long-term impacts of these effects require further study. As researchers continue to investigate the multiplier effect in food systems and emergency response, programs like VEE offer valuable data and insights. Future studies should aim to quantify not only the immediate economic impacts but also the long-term effects on community resilience, food system infrastructure, and social equity.

The multiplier effect as an economic theoretical concept reflects the idea that money pumped into a system will be amplified as it impacts people in its exchange. It is incredibly important to understand the financial implications and multiplier effect as it is related to THE federal disaster response authority and other sources of tax-payer funding relief money. There is evidence that the VEE funds were amplified through a 3-legged stool (food security, economic development, and agricultural resilience), where restaurants were reimbursed for providing meals to beneficiaries facing food security issues in Vermont. However, this paper argues that there are many ways in which that relief money was multiplied that cannot be accounted for within a capitalistic model. Drawing on an analysis of 42 interviews with VEE leadership, the VEE program multiplied relief money to develop a state-wide identity, new norms, and new networks that are difficult to account for financially, but, according to Buzzanell (2010), would serve to make the state more resilient during the pandemic and moving forward. It is impossible to account for the multiplication of those dollars from this social and resilience asset standpoint.

3.2.4. Direct Impacts of VEE

The direct impacts of the VEE program have been measured already by program administrators in their Economic Analysis Report, Restaurant Survey Report, Participant Survey Report, and other reports. We already know the amount of money invested by both the federal disaster response authority and the State of Vermont, the number of meals distributed, the number of restaurants, farms, hubs, and other charitable organizations that participated in the meal distribution process, and how much was multiplied by investing in this program, among others. VEE distributed over 3.6 million meals between August 2020 and March 2023, with 25000 meals being distributed weekly (VEE Economic Analysis, 2023), leveraging more than \$46 million in federal COVID-19 relief funding (VEE Economic Analysis, 2023; VEE Participant Survey Report 2023; Massie & Heiss, 2025). Over \$34 million in revenue was generated by participating restaurants and more than \$3.5 million for local farmers and food producers (VEE Economic Analysis, 2023). The program engaged 321 restaurants, with 211 still active at the program's conclusion. Restaurants were paid \$10 per meal, providing them with a crucial revenue stream during the pandemic (Massie & Heiss, 2025; VEE Economic Analysis, 2023).

VEE required that at least 10% of meal ingredients be sourced locally. Over 260 farmers participated, with 35% of meal ingredients coming from Vermont farms (VEE Economic Analysis, 2023) providing huge support to local agriculture. VEE's impact extended far beyond its food security goals. With an economic multiplier effect of \$78 million, \$10.1 million in private investment by restaurants, farms, and food producers, improved economic resilience which retained over 400 full-time employees, the

establishment of new partnerships between farmers and restaurants, and enhanced community cohesion among others, the successes of the program can only go on (VEE Economic Analysis, 2023).

More research is needed to understand the indirect effects of the VEE program that were beyond its direct measurable impacts. **This paper argues that the relief money from the VEE program was multiplied in ways that cannot be fully accounted for within a capitalistic model, as the multiplier ends when the initial flow of money ends. Drawing on an analysis of 42 interviews with VEE leadership, I argue that beyond the multiplier effect of the program, the program multiplied relief money to develop a statewide identity, new norms, and new networks that are lasting and more durable benefits of the program, which are difficult to quantify financially. I ask, beyond the direct impacts, what indirect impacts did VEE leadership perceive the VEE feeding program as having on Vermont communities?** This article will be valuable to policymakers, emergency management professionals, food system researchers, and emergency food response managers because complex, often intangible aspects of resilience that are difficult to quantify or commodify in traditional economic analyses of emergency response programs. It will provide insights into the limitations of purely economic metrics for evaluating the success of emergency response programs. By exploring what aspects of community resilience cannot be easily measured, the study can inform more holistic approaches to policy design and program evaluation.

3.3. Research Methods

This study employs a qualitative research design to understand the perceived indirect impacts of VEE on the state of Vermont from the perspectives of the program administrators and implementors. Qualitative research is a method of inquiry that focuses on understanding human experiences, behaviors, and interactions in their natural settings. It is characterized by its emphasis on exploring the depth and complexity of phenomena through the collection and analysis of narrative data (Creswell & Poth, 2016). Qualitative research involves the studied use and collection of a variety of empirical materials – case studies, personal experience, introspective, life story, interview, observational, historical, interactional, and visual texts – that describe routine and problematic moments and meanings in individuals’ lives (Denzin & Lincoln, 1994). This approach is particularly effective for uncovering rich, detailed insights and generating a comprehensive understanding of specific contexts, making it ideal for examining social programs such as the Vermont Everyone Eats (VEE) program. This approach was chosen to capture the diverse perspectives and experiences of participants involved in the program, including state officials, beneficiaries, organizers, and other stakeholders.

3.3.1. Participants

After obtaining human subject research approval, participants for the study were selected from several organizations and individuals who were engaged in the administration, coordination, and implementation of VEE, with varying levels of engagement in the program. They included community leaders, disaster response coordinators, local government officials, NGO representatives, and community members,

among others. Specifically, participants for this study are state government officials, Southeastern Vermont Community Action (SEVCA) Administrators, members of the Taskforce, and Hub officials. All the people who had had a role to play in the planning, organizing, and implementation of VEE were included in the pool of potential interviewees. We obtained a list of Hub and Hub directors which was made public on the VEE website and emailed those individuals. These participants were contacted via an email, inviting them to show their interest in being interviewed by filling out a survey and scheduling a time to be interviewed. Thirty-two of them agreed to interview with us, of which some of them participated in more than one (1) round of interviews, making a total of 42 interviews. The interviews were conducted on Microsoft Teams, which allowed for recording and transcribing of the interviews. **Table 1** shows the list of participants with their regional, organizational and sectoral affiliations, as well as VEE affiliation and rounds of interview participated in.

3.3.2. Recruitment

These participants were contacted via email, inviting them to show their interest in being interviewed by filling out a survey and scheduling a time to be interviewed. Due to varying reasons including interest and availability to be interviewed, only those who replied to the emails in the affirmative were contacted for the 45-60-minute interviews. Some of the participants participated in various rounds of the semi-structured Interviews. There were three rounds of semi-structured interviews. Some of the participants participated in only one round, with others participating in more than 1 round.

3.3.3. Interviews

The primary method of data collection involved conducting semi-structured interviews with key stakeholders within the operation of VEE. Semi-structured interviews were conducted to gather the lessons that were learned from the VEE program. According to Bernard (2017), semi-structured interviews are a qualitative research method where the interviewer follows a predetermined set of questions but is also free to explore additional topics that emerge during the conversation. This method allows for a flexible and in-depth exploration of participants' experiences and perspectives, providing rich, qualitative data that is crucial for understanding complex issues. It allows for other follow-up questions to emerge from the interview, aside from the planned follow-up questions of the interview. These semi-structured interviews were instrumental in uncovering nuanced insights into the program's implementation and outcomes while ensuring that key topics were covered consistently across all interviews. The interviews were conducted on Microsoft Teams, which allowed for recording and transcribing of the interviews. There were three rounds of semi-structured interviews. Some of the participants participated in only one round, with others participating in more than 1 round. For anonymity, participants have been given pseudonyms.

3.3.4. Data Analysis

The qualitative data collected from the semi-structured interviews went under thematic analysis. The data was then coded and categorized using NVivo 14 software, a qualitative data analysis software to facilitate a systematic analysis of the data. This process involves finding patterns, themes, and categories within and across the data

(Braun & Clarke, 2006; Clarke & Braun 2017; Owen, 1984, 1985). To qualitatively analyze the data, NVivo 14 was used. From the NVivo software, I used the Import menu to import the Teams Transcript files from the folder I created for them on my computer to the software. I then read through the uploaded files on NVivo to familiarize myself with the data (Braun, & Clarke, 2006) at which point I was making notes too.

Once I open a transcript file, I read through each line of the conversation and assign codes to the sentence, paragraph, or parts of the paragraph. From the Create menu, you can create new codes and assign them names and colors. While reading the text files, you can directly highlight the thoughts or ideas in the transcript to a code. I used this option, coding as I go, and allowing the codes to emerge. Here, I select the relevant text that corresponds to the idea, theme, or name I want to assign to it and create the code. If my brain registers that the code name I want to assign the selected text to exists already, I code the selected text to existing codes rather than new codes. Codes were allowed to emerge from the data, within and across transcripts. The data was then categorized with the aid of hierarchical coding or coding trees to help identify and generate initial themes across data points. The initial themes were then shuffled around several times until major and forceful repeating and reoccurring categories evolved that could address the research question (Braun, & Clarke, 2006; Owen, 1984, 1985). In the analysis, quotations from both Hub and Taskforce participants are included to honor the voices of the interviewees.

3.4. Analysis

Based on the review of the literature related to emergency feeding programs, their measurement and the Multiplier Effect, and the thematic analysis of **42 interviews with**

VEE leadership and organizers, I argue that the VEE leadership perceived the impact of the program as more magnified and extending beyond the intended and reported directly measured impacts. VEE leadership perceived the impact of the program as larger or more magnified than those impacts that were directly measured. VEE leadership perceived the economic impact of the program as far-reaching, potentially creating ripple effects throughout local economies. As such, this research will focus on the indirect impacts of the program that are not easily measured quantitatively. These indirect impacts will be analyzed to show the effects, which even though could be far-reaching, they had on communities in Vermont. In this section, I argue that they perceived the program as contributing to Vermont's communities by (1) improving service delivery of food aid programs, (2) building and empowering communities, and (3) breaking silos and forming unlikely partnerships, all indirect impacts of the program far extending beyond its intended or direct economic and other benefits. A summary of the themes and sub-themes is provided in **Table 2**.

3.4.1 Improving Service Delivery of Food Aid Programs

VEE programming and service-delivery structure promoted equity and inclusivity, which helped to increase participation in the program. This can be seen in the number of participants and meals served directly measured. However, the VEE leadership perceived the programs' ability to improve service delivery of food aid programs was not measured. VEE's feeding structure helped shift perceptions around food assistance and reduced the stigma associated with seeking help. VEE was perceived

as addressing issues of equity in food access more comprehensively than traditional programs.

The VEE program structure fostered kindness and compassion. Interview participants perceived the VEE program to have fostered a sense of kindness and compassion toward individuals in Vermont during the time of crises when the program was being implemented. Ziggy, a Taskforce member and a Hub manager, recounted this, “There is a tremendous amount of equity and kindness and compassion in this system that also has the capability to be institutional.” In some of the hubs, community members delivered meals to their neighbors as volunteers. They recognized that they were in a time of crisis so one little thing they did would impact others, including offering car delivery services to help convey meals to participants, especially meal beneficiaries that did not have a means of transportation. Joanne, a Hub manager, recounted how some community members became volunteer drivers to help distribute food to their neighbors, showing kindness and compassion to their neighbors who did not have cars to pick up food or could not pick up the food themselves. She said, “Using a rural community transport volunteer driver delivering them to the homes of families for whom home transportation is a barrier, like they can't even get to our food shelf.” Ziggy’s hub “had a team of volunteers that were people whose work had been suspended for social distancing or lockdown reasons” who helped with “spreading the word and getting things done”. Ziggy however recounted some challenges that came with the volunteer aspect of delivery at his hub. On the positive side however, he shared that some of the restaurants stepped up when such situations arose. He shared, “When you're dealing with a volunteer-dependent

organization, if someone is sick or doesn't want to play for the day, someone else has to pick that up because the meals just can't sit there. And some restaurants have stepped up more and are more involved in the delivery process now.”

In some hubs, a volunteering system with stipends was employed to help make meal distribution easier. Zeynep’s hub employed such a method. She said, “I would give volunteers stipends to help with deliveries and that seemed to be a pretty good system.” She also shared how people in Vermont were moved to help VEE efforts in her hub. She said “Cause everyone, at least in my experience with it, everybody wants to help. You know, when we moved buildings a few times, everybody always wanted to pitch in and you know, can we help move? How can we help? They always were, can we deliver? I had folks who were also receiving meals because they wanted to be able to help. Because I think when you really get down to it with folks and have the communication, there's very few people that just want my hand out.” Amy shared a similar view of kindness and compassion. She shared, “Like I saw a lot of very dedicated volunteers, very dedicated restaurants pushing very hard and then as it became year two and year 2 1/2, everyone was like, ohh gosh, can we do this forever?”. Nadine, a Hub manager, recounted how some of her volunteers even rejected mileage coverage, showing their compassion and dedication to a joint Vermont cause. She said, “We have gotten an incredible response from volunteers, like this just seems like a role that people really want to play. Um, we've gotten a lot of volunteer—we’ve offered to reimburse their mileage, albeit at the federal charity rate, which is very slim, but still most of them have denied that so it's free for us

to have their help and I have—I work with maybe four weekly volunteers right now who week in, week out, every week for months, you know, do this route.”

VEE was perceived as a program that brought Vermonters together in a time of crisis when people were lonely in their homes. People come out of their homes to see others at restaurants and distribution centers. It was not about seeing people that were needing food; instead, it was exciting to see another person and be in community with them. Monica, a Hub manager, recounted how VEE reduced stigma by creating an avenue for people to meet. She said, “Another need that was met by [Vermont] Everyone Eats was the need for connection, the need for belonging and the need for participation in the community. And that's an intangible, but there are some people who might go and accept a meal not because they are hungry for food, but because they're hungry for human care. And that's something that doesn't get quantified or supported in our system as readily as some things that are tangible. But that's another area that I just think we could do better at: acknowledging the mental health component of feeling cared for and how that benefits community.” Collin, a Hub manager, shared some conversations that went on when people came out of their homes to get food at restaurants and distribution centers during the VEE program, fostering a sense of community during a time of loneliness in crisis. He shared some of the conversations that transpired among meal beneficiaries, “I was like, oh, this guy's dog did X', or 'this one's comes up and hangs on me '. Oh, this old man, you can't get away from him because he chats, you hear [conversations] for 15 to 20 minutes, the relationships that they were building, um, was really heartening so much.” Neil Young, a Taskforce member, also recounted a similar

view on how VEE brought Vermonters together to help themselves. He said, “everybody felt like they were participating in something that was helping other parties as well as themselves, so it wasn't a giving and taking, it was a giving and giving.” Courtney, a Taskforce member and a Hub manager also said, “It didn't look [at] the model of the charitable food industry that have come before, but it really issued that model a little bit in the interest of making it as accessible to folks as possible, and I think that unified communities that were receiving the meals to feel like they were more part of a community support effort during the pandemic and less about a food security effort. Specifically, they were uplifting their community the same as the community was uplifting them, and that to me, that sort of reciprocity, is what I keep coming back to, is that it had a reciprocal element built into it.”

VEE was perceived by program administrators to have promoted equity and inclusion in Vermont. VEE was perceived to be equitable in the sense that it was administered in all 14 counties of Vermont. Zeynep recounted how the program was able to achieve its state-wide coverage goal. She said, “It was really great how we were all able to work together to accomplish these goals across the state that you know, it wasn't just counties working together, it was statewide, and I think that was really successful.” Counties tweaked the program to suit the needs of their residents given the knowledge of what would better work for their population. Bella, a Hub manager, had this to say about how there was equity in the management of VEE across counties in Vermont. She said, “Everyone living in the different, you know, counties sort of knew what would work best based on the population that they were trying to reach.” On the other side, Bella

recounted how there was a bit of a struggle to get an equal share of the program across regions, which she was as normal when it comes to getting a share of programs' or "national/state cake". She recounted, "It was like one of those things where you wanted to jump out the opportunity because you didn't want the story of [Vermont] Everyone Eats to not include like your region, and so that's where it becomes so regional, you're fighting for your little spot of the larger Vermont pie." She, however, stated that sharing equally or not of Vermont's 'cake' may not have been done deliberately but more of an inevitable thing when it comes to public funds. She continued, "And so there's, like I would say, and maybe that's the opposite side of it, where like it's the beauty of it, but also it becomes really hard because you're trying to like make sure that like your region specifically isn't being left out of something. Umm, because I don't think that was ever anyone intention, but it's also just really hard to make sure that literally every region is accounted for everything."

Interview participants also perceived VEE to be inclusive. All Vermonters could access the program, making the program very inclusive. Justin, a Hub manager, recounted, "And we're allowing the consumer to really have a more convenient on demand, geo-located way to access those meals, and it's been described as a discreet way where they feel like a regular customer. And you know that's what we call them. We usually say users or customers." In Neil Young's account of the testimonies of meal beneficiaries, he said, "Heard of people saying, I have lived across from that restaurant my whole life, and I can never afford to get a meal there, and now I'm getting a free meal there." Monica recounted how the program was open to everyone in Vermont. She said,

“So we did our best to remove the stigma by saying everyone eats. That's where the name came from. Everyone in the community, you don't have to tell us why. If you need a meal for whatever reason, we trust that you're not going to come get a meal if you don't need one.”

Additionally, participating restaurants were perceived to receive an equitable amount for each meal (\$10) provided to cover the cost of production. Vera, a Hub manager, recounted how a restaurant owner found the \$10 to be equitable for the costs of covering the meal production. She quoted the person to say, “Yeah, it's great that you're paying me the \$10 a meal. I really want to do something for my community.” Restaurants getting paid for their inclusion in the VEE program served as a support for their businesses during a time of global health and economic crises, and an avenue to keep the Vermont economy going. Buffy, a Taskforce member, shared a similar view on this. She said, “Restaurants got paid and everybody got the meals for free, and so that was a way for us to support.” She continued to talk about how impactful VEE was to both restaurants and local producers, as restaurants needed to have sourced at least 10% of their raw materials from local producers. She recounted, “But hearing how impactful the program was/is to producers, local growers and restaurants was really the big piece for me. How much they relied on this program to keep them going was pretty amazing.” Bjock shared how covering the full cost of production prevented restaurants and other meal providers from putting external costs on the community. She shared, “How do we actually cover the full cost in a way that's not externalizing costs to some other pain point somewhere else in our community.” Nadine had a similar view of how equitable the

prices of the restaurant-prepared meals of VEE were. She said, “I can't imagine paying less than 10 dollars a meal. I mean, that's just cutting even further into the issue.”

Buffy was strongly against meal programs that paid less for the meals provided and believed providers in such situations had no choice but to provide low quality meals. She narrated, “A big sticking point has been what we pay, so all these different programs and federal parameters keep the amount we can reimburse for meals at a particular level, which is not \$10 a meal, and so [Vermont] Everyone Eats created a way where we paid more for every meal than other providers get paid through their federal and/or state guidelines, so that can be tension, but it can also be a point of success, 'cause I think we were very specific in designing [Vermont] Everyone Eats to say, if we have the capacity to pay a higher rate, we're not gonna keep the rate artificially low. If this is really about economic development for restaurants, we need to pay the true cost of what it takes to make a meal, so by virtue of doing that and making that decision, again, it creates this tension when a Meals on Wheels provider says, ‘Hey, but I only get paid \$3 a meal. I can't compete basically with Everybody Eats’, we don't want you to compete, we wanna help figure out how you can get paid more.” To Buffy, the \$10 was equitable, even though it created some “tensions” with other traditional feeding programs that were receiving less than even a half of that. She continued, “Rather than paying restaurants only \$3 or \$5 for a meal or whatever it is, we didn't wanna set up this parameter where everybody doesn't get what they need.”

VEE was perceived to promote and cater for the diverse food needs of meal beneficiaries. The program served people who were food insecure already, and people who were becoming food insecure for the first time. Beck, a Taskforce member, agreed to this by saying, “So yeah. I think this program was born out of an urgency to address primarily folks who were finding themselves food insecure, who were already food insecure, but what was unique about this scenario was a lot of people who were becoming food insecure for the first time, artists musicians and restaurant workers and people who are just unable to work due to the pandemic.” Jane expressed similar view by recounting, “Uhm, and it was always really well received, and it always attracted individuals that weren't necessarily accessing food shelves.” Tom, a Taskforce member, shared similar views of VEE catering for both people who were newly food insecure and people who had existing food insecurity. He said, “All of a sudden you have all these people, and a lot of them were kinda new to being nutrition insecure, but I believe that you had a lot of people that were on like, ‘Oh, here's a program that I can get on board with, I would rather engage with compared to SNAP or even go into the food bank’.” Monica shared her view on how hunger was an emergency at all times, emphasizing the need for a food program like the VEE. She shared, “In addition to the fact that hunger is always an emergency pandemic or not, so there are people who need food anyway, and with inflation rising and the supply chain [disruptions], and there's a lot of things that have impacted people's access to the things that they need. Physical and cognitive limitations that make it difficult or impossible for them to prepare food.”

The program also served people with meals that could speak to their various individual food needs. Meals provided included vegan, vegetarian, and other options. Monica shared how her hub catered to the diverse food needs of their clients. She shared, “Offering in our hub, we were offering meat, or I think we called it omnivore at the beginning, then it got changed to meat vegetarian, gluten-free or vegan. There were four options. And so, then people could say ‘I have special dietary concerns’, ‘I don't eat pork’ or ‘I can't have black pepper’, so we require our restaurants to include all the information about all of the ingredients on a label on the meal so that people could tell whether they could have it or not. So, we did our best, like food choices, dignity, where food is concerned. So, we did our very best to give people choice, and some people would request specific restaurants or say, ‘just not from that one restaurant that I don't like’. And we were like, ‘great, if we can fulfill that’.” Zeynep shared her experience of how VEE catered to the diverse food needs of meal beneficiaries. She shared, “...and I think the biggest part that I kept hearing was the personalized humanity aspect of it, which was, you know, meals that fit dietary restrictions, meals made specifically for people versus getting expired food. So, I think having that human aspect to it is important.” Beck recounted how they navigated between fresh and frozen meals preferences of beneficiaries. He said, “Like, what are the different needs in terms of fresh meals or frozen meals or, you know, delivered in a bundle, and then what kind of food works?”. Collin also recounted how they incorporated the food needs and preferences of their clients into their menu, even though it came with some learning curve to them. He stated, “It allowed the community to say, ‘Hey, I'm vegetarian’, ‘vegan’. ‘I don't eat

pork'. 'You could sub this in and out'. If you had the same menu laid out for each place to be making it, would allow it to be more efficient. There were some hard lessons in September and October figuring this out before we started doing menus. Yeah.”

VEE promoted dignity among the people of Vermont. Clients of the program did not need to show stringent documentation to prove their need unlike traditional food programs, making it accessible to all who had need for food during a time of crisis. Beck said, “This program is not gonna live and solve hunger, but it's helping those who maybe don't qualify for food stamps, and that's kind of been the real beauty of it, I think, is that all of those folks who otherwise were not getting food assistance who maybe need it, now have access to it without a stigma, they don't have to. And they just have to basically attest that they were impacted by covid in this situation, and moving forward, you the just to need attest that they needed it.” Bella shared how the high-quality meals provided was long awaited and dignifying to program beneficiaries. She said, “People deserve high-quality meals, and they deserve food choice, and they deserve food with dignity and at the same time, with prepared meals. That, I think, have long been like wanted, like these fresh meals, high-quality meals I think is like something that the population has wanted and needed. So, I think like we're hitting that.”

Tom shares how people are hesitant to access government feeding programs due to the stigma associated with it. He said, “There's lots of people who don't wanna be associated with state, government or philanthropic assistance in that way; it feels like they're depending on someone. So, the opportunity to anonymously connect with the services offered by your community, I think has a lot of value for folks too. The stigma,

and the fact that it's burdensome to sign up for SNAP.” For Karen, a Taskforce member and a Hub manager, VEE did not only provide dignity to meal beneficiaries alone but to the participating NGOs as well, who usually have to work around their funding in an undignified manner. She recounted, “We talk a lot about giving dignity to the people who are experiencing homelessness or experiencing food insecurity, and I think my question is, are we giving dignity to the nonprofits who are serving them? Who are constantly having to be in this scarcity mindset? and Vermont Everyone Eats was a moment where, in this odd way, in this global pandemic, we all got a relief from experiencing scarcity in what we were providing as non-profits?”. Miela, a Hub manager, also agreed that VEE afforded dignity to its meal beneficiaries. She said, “I think that we've just seen like the success of this program grow because of the dignity it affords people who may need a hand up.” She continued, “And not having any requirements in order to qualify for the program, I think is a huge part of um building dignity into the way it works.”

VEE helped shift perceptions around food assistance and reduced the stigma associated with seeking help. The \$10 restaurant-quality meals were provided by participating restaurants and meal providers were seen as more dignified than the \$3 meals usually provided by most traditional food programs. This view was shared by Bjork, a Taskforce member and a Hub manager. She shared, “So something like \$10, you know, that's been like a really important part of the program is sort of like forcing this shift of the mind away from like ‘food assistance needs to be the cheapest possible calories’.” Emily, a Hub manager, had the same view of the programs accessibility and how dignified it was to beneficiaries. She said, “Uhm, to be coming to get meals, and

that's why I really like that we don't really have sign-ups, and no questions asked. You know, we just record how many households are getting [the meals], how many individuals. It just really reduces the stigma of like coming to get those meals.” She added, “Programs like with food stamps and things like that, there's a lot of like social stigma with them, whereas with bringing meals to where people are already going, you know, bringing them to their schools and things. So, they don't have to go out of their way to do something. It just, like, reduces the stigma in general and a big success for that's like people really like these meals. They don't feel guilty about it. You don't feel like you're going out of your way to do that so.” The same can be said for Joanne. She said, “I love Vermont Everyone Eats. Uh normalizes in a way. You know it takes away; it mitigates the stigma that keeps a number of people from getting what they need. More dignified and less stigmatized for the people who benefit from it.”

3.4.2. Community Building and Empowerment

The VEE program demonstrated a direct measurable impact on community organizing. 10+ nonprofits, 257 restaurants (VEE Restaurant Survey Report), 340 farmers and food producers (VEE Farmer and Food Producer Survey Report), and 6 government agencies were involved in the planning and implementation of the VEE programs. VEE leaders perceived the impact of the program on community building to be greater than those measurable numbers. According to VEE leadership, VEE had a significant impact on strengthening community ties and fostering a sense of collective action.

VEE was perceived to have built and empowered communities by fostering cross-sector involvement. All sectors were involved (restaurants, NGOs, farms, and businesses) in the implementation of the program. Monica recounts how the VEE program included a diversity of voices with representation from government organizations, nonprofits and community leaders who all brought their respective skills and knowledge to the decision-making tables of VEE. She shared, “I think getting a lot of like, a diversity of voices in the decision-making space, it's really important. Umm, you can't have everybody in the room all at once, right? But choosing, you know, like a diversity of where representation [is]. Making sure that there are multiple nonprofits at the table, and that there are multiple different government agencies at the table, and that there are certainly people who are the decision-makers and change-makers, but also, it's helpful when there are people who have multiple roles in their communities. So, people who are also, maybe they volunteer at the local food shelf or like they've got a perspective from the ground that they can bring into that.” Buffy also speaks about the coming together of people across several sectors for VEE programming and implementation. She recounted, “the cross-sector collaboration, having emergency management folks, town and municipality reps, homeless service providers, mutual aid groups, medical folks, all together, we were meeting...” She continued to share some of the initial broad ideas they brainstormed. She said, “how do you mobilize volunteers, how do you assess needs and then mobilize people to address them? It just goes on and on.” Courtney had similar views that VEE’s multi-sector approach fostered collaborations across several state organizations that previously may not have

collaborated on issues. She said, “the inter-agency collaboration is at the state government, state-wide agency level, that sort of multi-sector unifying approach.”

From State-level organizing to Hub regional planning to Local community groups, we could see various levels of cross-sector involvements coming into play. In moments where some counties and hubs did not have the capacity to run their VEE program effectively, other counties and hubs came in to render their help until they were able to stand on their feet on their own. Bella mentioned how her county received such help. She recounted, “And so it was nice to be able to sort of rely on Chittenden County in a time where they had just a little bit more capacity, but that ultimately we were then able to sort of build up the program in our region as well.” Bella continued to share how valuable collaborations and involvements of non-profits and for-profits impacted VEE and Vermont in general. She said, “The relationship between like nonprofits and for profit, businesses that like we could be using local businesses as a resource and a lot of the time they do wanna be involved in work like that and so umm, I think having that mindset for anything like not just restaurants but like just thinking of, umm, the businesses community as another valuable asset and resource for us to like tap into.” Bella again shared how the hub meetings fostered regional collaborations and inputs. She said, “The hub meetings where we got to meet with all the other regional partners was always awesome in terms of being able to like learn from what everyone else was doing, I think that there are aspects of [VEE] where there were so many people involved.”

Through the operations of SEVCA and the statewide Taskforce which was made up of people from state government and non-profits in a wide range of sectors like emergency services, human services, economic development, food systems, agriculture, food security, community development among others, Vermonters were able to solve the hunger crises caused by the COVID-19 pandemic by placing VEE as a solution to a system of complex problems. Monica described this, “the Task Force became more aware of the statewide context of systems level thinking. When you think of the food system as the hub that we're thinking about, it's sort of intersecting hubs or a Venn diagram. So, we all had a lot of opportunity to practice thinking about all the different pieces of the food system and how they come together and to learn more about pieces that might be really peripheral to the work that I do.” She continued, “None of us could have done it alone. And so together, we all build a program and everybody in that room has participated in the building of that program, and they've all been able to add their input, and in fact, everybody has been invited to participate in any part of it that they want, so if you wanted to be involved, we don't have any mechanism to say ‘No’ to people.”

Through the VEE program, participating NGO's budgets increased. Some of the meal providers were nonprofits that engaged the services of restaurants or cooked the meals themselves. Through participating in VEE, they got in touch with huge funds to be able to expand their reach and impact to and beyond the populations they were already serving in their respective projects. Naomi, a Hub manager, explained how her NGO accepted to be a part of VEE and grew to become a hub that provided VEE meals at a large scale. She recounted, “and then accepting, embracing and even becoming the hub.

Like I said, we grew up so much. And then within that, the need, yeah, of realizing like, hey, all these pieces just at the scale, the volume, the coordination of what we're doing necessitated for sure.” She continued with how it afforded them the ability to better coordinate their staffing with their now available resources when they participated in the VEE program. “I think [VEE] absolutely brought that maturity and capacity for us to think in those ways. Right. Like instead of just a couple of us running around, we were able to coordinate staffing and, you know, resources in a way that made us able to contribute that volume.” To her, the funding received to participate in VEE was a great growth boost for her NGO propelling them to believe in their ability to cause huge impacts in Vermont. She said, “There's like these once-in-a-generation moments assistance funding coming through and we're fortunately receiving some of that, and so you know, I think we buckled our seatbelts, right. But I think [VEE] really showed us that we can do this, we can do this in a big way and be agile and thorough at the same time.” For Vera on the other hand, even though she acknowledged the growth in the workload of her NGO, she complained that participating in VEE was labor intensive for her outfit. She said, “Well, our organization has never done anything like this before, so it definitely has changed. It's more, it's very labor intensive, at least for me, because I'm paying every restaurant every week. So, you know just right there that's 77 checks that I'm writing every week. I have to get the information from the restaurants, I'm reporting once a month to SEVCA, telling the restaurants every week what to do. So, it is kind of labor intensive and very different than any of our other grants that we do.”

Interview participants perceived the VEE program to breed community empowerment among Vermont communities. The involvement of local communities at each step of the design and implementation of the program was seen as empowering. Local control was seen as being an important part of the VEE program, helping to suit VEE to each community. Monica recounted how local control of the program empowered communities in Vermont. She said, “Local control is a really important facet of this system where the communities were the eaters. People who work in those communities know best who is hungry and who needs a meal? They know where the need is, so empowering the communities via the community hubs has allowed each community to be best served by the program, which is not the way all programs are run. Some programs are top-down.” For Amy, VEE soared on the involvement of local communities and organizations, and the general generous nature of Vermonters to be successful. She said, “So much of this program operated on the backs of local communities and community organizations, and the generosity of the people who already have those connections and that drive to support their communities, and that care.”

People from local communities and all sectors came out to help because they saw the program as being created with them in mind. Clients were empowered to receive a meal because they were included it in. Courtney recounted how the program unified communities. She stated, “And I think that unified communities that were receiving the meals to feel like they were more part of a community support effort during the pandemic and less about a food security effort specifically, is that they were uplifting their community the same as the community was uplifting them, and that to me, that sort of

reciprocity is what I keep coming back to, is that it had a reciprocal element built into it". Grace, a Taskforce member and a Hub manager, was of similar view; "having people feel 'I'm not only comfortable,' but even 'proud' to be contributing to helping their community by saving a restaurant from having to close." Monica recounted what a client said. She quoted the client to have said, "so if I if I accept a meal, I'm helping a restaurant, I'm helping a farmer. OK, I can do that." Zeynep saw "the collaboration between the different entities" in the design and implementation to be one of the biggest highlights of the program for her.

VEE was perceived to have built community networks to empower communities in Vermont. Existing networks were strengthened through the program and leveraged for the VEE program. New networks were formed. Buffy shared how her hub made use of existing networks in the distribution of their meals. She said, "We had some local food shelves and meal programs who distributed [Vermont] Everyone Eats meals instead. So, we using the existing network of charitable food has a good effect, I think, on [Vermont] Everyone Eats." Amy described how the existing networks and partnerships in Vermont were utilized during the design of VEE. She recounted, "There are networks that were already in place between restaurants or community organizations, all these partnerships, and had we tried to design them from the start based on our ideas of the network, it would have been a very different program." Zeynep's view on the use of existing networks to build Vermont communities in a time of crises was not different. She shared, "It's important to see how when a community comes together with people who are working in their various fields, you know, rather than pulling in and you know

different contractors, I think working with existing businesses to mobilize for an emergency response can be extremely effective.”

Participants also perceived that VEE encouraged the peer sharing of knowledge and expertise among program administrators and implementers, community leaders and other groups during a time of crisis. Amy described how the ideas of community leaders and community members were infused into their decision-making processes to ensure a successful implementation of VEE. She said, “It’s an iterative process of how to work interdependently and how to work at multiple levels of decision-making. Listening to the community leaders and the community members to help drive decision-making is a key part of this.” Monica also recounted how people worked together in a knowledge-sharing process for the benefit of VEE in a time of crisis. She said, “I think is very fundamental because the way that people work together or the ways that they attempt to work together determines how efficiently and effectively their work together is. And when you have as we did, a crisis situation that we’re trying to respond to with needs across the state across sectors, varying degrees of needs. All these things are all variable, right? It’s a lot.”

Monica again shared how taskforce meetings encouraged the peer sharing of knowledge and expertise during a time of crisis. She said, “I can tell you that every single week, a group of stakeholders, statewide stakeholders gathered for what we call the task force meeting, VEE task force and that includes the leadership from large nonprofits and representatives from various state agencies, and it included those of us who were working on the ground with the hubs. And so I heard over and over again from people in those

meetings that the pandemic as a whole has taught us how to work collaboratively in ways that a lot of people hadn't before, and that is a really important thing to carry forward.”

3.4.3. Breaking Silos and Forming Unlikely Partnerships

The VEE program demonstrated a direct measurable impact on several sectors. 16+ of organizations from several sectors were involved in the planning and implementation of the VEE programs. VEE leaders perceived the impact of cross-sector collaboration as being greater than including different sectors. These new cross-sector collaborations fostered innovative program design and delivery, providing communities with more than food security. Through effective collaborations and relationships that resulted from the solo-breaking, the VEE program facilitated valuable social connections and trust within communities.

VEE was perceived by interview participants to have broken silos and formed unlikely partnerships. VEE was perceived by interviewees to have created an avenue for forming partnerships and relationships that broke silos. VEE fostered relationships and engagements between nonprofits and private businesses, as well as between government agencies, beneficial to all parties. VEE facilitated new collaborations across sectors that will have lasting impacts beyond the program itself. Remi, a Hub manager, had this to say about their restaurant partners who have been instrumental in their VEE programming. She said, “And I also don't want to lose this idea that restaurants are really efficient, wonderful partners in addressing hunger. They have the commercial kitchens. They have the know-how, the recipes, the staff. They have efficiencies.”

Amy thought that there was siloed thinking and operations in the existing structure of improving food security in Vermont, and through VEE, that was deflated. She recounted, “I think that's the hardest part about the collective work. We still live in a sort of highly structured, top-down society.” However, she also thought that the collaborations should be continued post-VEE to avoid going back into siloed thinking and operations. She said, “But also, I think we run the risk of going back to our silos if we all hot potato the work. So, understanding that we could divide the work and sort of share in that is also part of it.” Ben, a Taskforce member, had a similar view; he thought that collaborations happened across silos, even though they lost some of those collaborations after the program came to an end. He said, “All of the coordination and cooperation that happened across silos in the nonprofit sector, really broke some of that down post-COVID. And I think I've seen some of it has faded away, but a lot of it has stayed.” Monica described her experience of how state agencies that had not previously worked together ended up doing so during the VEE program. She said, “And I just heard that from many directions, from people working in many sectors and many types of organizations or businesses or situations that, that wasn't as much of a habit before the pandemic as it became during the pandemic because we were all working together, we were all in the crisis together. And then that collaboration took hold and a lot of those people said ‘I wanna make sure that we continue working this way’. There were state agencies working together that had never worked together on an interagency project before in this way. And so, like, oh, wow, look, look at how much we can do if we work together and collaborate.” Courtney also believes that there was “silo-busting” during the

design and implementation of VEE, that contributed to the success of the program and Vermont's resilience overall. She said, "I've also heard it described from other folks as 'silo-busting'. Yeah, it really makes sense because it really busts people out of the silos that they've been operating in, and state government is notorious for that, so are non-profits, frankly and academia, so gently elbowing out of the silo, but I think that the model of it set that tone from the beginning."

According to Beck, restaurants in Vermont did not previously have a joint organization to champion their causes but did so during the time VEE was rolled out. Beck shared, "...but they had no organization that represented the restaurant industry, there's a Vermont retail grocers association that represents a section of the industry somewhat, but there's a hospitality organization as a Lodging Association, but until COVID hit, there was never really an organized body that would support restaurants either from an advocacy standpoint or from a direct support, marketing or whatever it might be." She continued, "So I think the formation of the Vermont Independent Restaurant Group that now is being housed under the Vermont Chamber of Commerce, those are all restaurant owners that are part of that body, and I would hope that they could get continued support to really help them when they need it... So, I think that's definitely a learning. Was a big, they had to, in the worst of times, they had to do more work and think about how to advocate for themselves, so I think that will continue in some form or shape, which is great."

VEE was perceived to have engaged in innovative problem identification and programming for the communities of Vermont. VEE was an innovative approach to the pandemic that they perceive as having impacted the number of meals served as well as emergency feeding programming in the future. Grace shared how the design of the program was innovative. She recounted, “And so I think a lot of that understanding was incorporated into the design of Vermont Everyone Eats, and you know yet again that proved to be true. A universal low barrier to entry model was very effective.” Monica said, “Well, there's actually more than one thing, so one thing that was really important and built into [Vermont] Everyone Eats and to the highest degree that we could to Emergency Eats is that in a crisis, people should not have to provide means-tested documentation about whether or not they're income qualified or necessarily even situationally qualified. We heard from our community partners in a couple specific communities, where they were like ‘Nobody is going to come and get a meal if they have to tell you that they need a meal.’ And so, something that we learned was that by not requiring people to certify anything in writing necessarily, we found ways to certify people's needs to verify their need. That was, like, so noninvasive, but they were still like, someone was watching.” She continued, “There's a thing we worked very hard to come up with - a system that would ensure that the meals went to the people who needed them and who qualified for them without having to ask that person directly any questions that might feel invasive to them. Like, what's your name? Where do you live? Or why do you qualify? And do you need a meal? Like our community partners in several counties said ‘those questions? Nobody will get a meal if they have to answer those questions’. There's

so much generational trauma with government invasiveness and programs, government intrusion into people's privacy, it's perceived that way, even if it was always, well, meaning the right thing.” Remi shared a similar view on how the program’s innovation increased participation beyond the usual that is seen in meal programs. She said, “It's the best quality anyone has ever seen in a meal program of this nature. And so, it's sort of precedent-setting, and then participation is high because of the quality and the dignity involved.”

Buffy also spoke about the innovative program design of VEE. She said, “We didn't wanna set up this parameter where everybody doesn't get what they need. We're at least designing a program that addresses the real costs of producing food and meals, I think that's what I would hope we can move forward into is how can we address some of the systemic issues that make it really hard for systems like schools and councils on Aging to deliver high-quality products to a lot of people for a relatively low cost, and what do they do to make up the difference, and let's not have people running on a deficit or needing to make really hard choices because they're not getting paid what it costs. They're getting paid what they're allowed to get paid, and they have to figure it out, so I would like to look at that, and I think we need energy in both camps to really look at that and sort of dig into that a little bit.” Buffy again shared how innovative VEE was. She said, “It not only provided food, but it also worked in the three pillars with the producers and the restaurant, so I feel like that's really what is the most innovative quality to me. It wasn't just aiming at one issue and "solving" the one issue, it was an integrated or integrative approach, and that sort of built upon a much stronger foundation than

programs I've seen before in that same sort of similar concept.” She continued to express how VEE was modeled to be a win-win situation for all parties involved. She said, “Whole community effort for recovery, and it had co-benefits in terms of helping restaurants, helping farmers, and helping people who are experiencing food insecurity? All in a way which felt like win-win and not zero sum, so there was basically no stigma for users.” Naomi described the volume of programming as “unprecedented”. She said, “The capacity of service that we were able to buy provide to the community was like completely unprecedented.”

VEE was perceived to have built social capital and trust in Vermont communities. During the pandemic, the VEE program participants built social capital that helped them design and deliver the program. The leadership thinks collaboration will continue after the program ends. They also think that groups may draw on this social capital in future approaches to crisis.

Social capital was built through the Hub and Taskforce elements of VEE. These groups had regular weekly meetings where they discussed VEE program matters as they arose. Amy relayed how the VEE program benefited from a community-of-practice model. She said, “I mean Vermont Everyone Eats started out with a great sort of community of practice model.” Monica shared how through the VEE program social capital was built that may not be achieved in other parts of the country. She said, “The way that we work together and the way that we communicate and the way that we are prepared to work together with people that we don't yet have a relationship with. All of that is like a

cultural tone that can be set at any time, and I think one of the reasons that Vermont has been successful with [Vermont] Everyone Eats and other projects since then is that this is something that Vermonters kind of do anyway. It's not true in every organization, maybe more so than other states that are a little more rigid about those kinds of interactions.” She continued, “It was, it was by necessity, but then the experience of it actually took root, and I think that many people who were involved are carrying that forward into the work that they're doing now.”

VEE was perceived to have built on the existing resilience and other cultures in Vermont. Vermonters have a huge social capital of helping themselves or coming together to pursue a general good, especially in times of crises, and this came into play during the VEE. VEE resulted from the resiliency of Vermont communities and in turn created more resilience. Monica shared, “I think VEE is a result of the resiliency of the community in which it was built. I think Vermont is a very resilient little state and when COVID hit, they found creative ways to build community in a time where we were having to be siloed apart and I think the Vermont Everyone Eats meals were really helpful in building community and supporting ag[riculture], restaurants, people in need, anyone, really everyone.” She continued, “So I think that will stick with me how they got the funding and quickly pivoted and they're like, okay, this is what we're going to do. We're going to support our people and we're going to do that within our economy, our local economies, with our restaurant workers and staff. We're going to do that for our farmers who aren't going to farmers' markets or having CSAs right now we're going to help them be able to have their food be used in a way that can move through the

restaurants to the people in need.” Nadine shared how VEE strengthened the food system in Vermont and contributed to Vermont’s resilience which she thinks would live on. She said, “It’s creating these partnerships that are going to live on and continue to strengthen the system and make our food system more resilient for everyone involved: for eaters, for farmers, for food preparers.”

3.5. Discussion

3.5.1. Introduction

The multiplier effect, an economic theoretical concept, reflects the idea that money pumped into a system will be amplified as it impacts people in its exchange. There is evidence that the Vermont Everyone Eats funds were amplified through a "three-legged stool" approach; supporting local restaurants, and food producers, and addressing food insecurity simultaneously (VEE Economic Analysis, 2023). Through this study, I sought to understand what indirect impacts organizers and implementers of VEE perceived the program as having on Vermont communities and Vermont as a whole. I sought to understand what indirect impacts of VEE were perceived to extend far beyond those direct benefits and impacts that were measured by program administrators in the various program reports. This paper argued that the relief money from the VEE program was multiplied in ways that cannot be fully accounted for within a capitalistic model. Even though the direct objective of VEE was to provide meals to food-insecure Vermonters during the COVID-19 pandemic, and boost the Vermont economy, VEE was perceived by its leadership to extend far beyond those goals to include unintended ones like improving service delivery of food aid, fostering community building and

empowerment, and breaking silos and forming unlikely partnerships, which are broader structural, social and psychological benefits for all Vermonters. The program multiplied relief money to develop a statewide identity, new norms, and new networks that are difficult to quantify financially. The VEE program fostered a sense of community, collaboration, and resilience that extended beyond the immediate financial impacts. This section discusses the theoretical and practical implications of the study, as well as the limitations and future research directions for other studies. It ends with a conclusion to the study.

3.5.2. Theoretical Implications

This paper examined how leaders of VEE, a COVID-19 food relief program perceived the benefits and impacts of the program extending beyond the quantifiable measured goals of the program. VEE program leadership perceived the program to have multiplied funds beyond those that were directly measured in the program reports, impacts that were more intangible to measure. Program administrators perceived VEE to have improved service delivery of food aid programs by fostering kindness and compassion among Vermonters, promoting dignity, and promoting equity and inclusion. VEE was perceived to have built and empowered Vermont communities by fostering cross-sector involvement, fostering community empowerment and fostering community networks. Additionally, VEE broke silos and formed unlikely partnerships through the forming of partnerships and relations, innovative problem identification programming, and building social capital and trust. All these intangible indirect impacts of the program shows that economic models like the multiplier effect is not enough to measure the outcome of a program aimed at boosting the economy. This agrees with Buzzanell

(2010) and Houston et al. (2015) as these social and resilience assets would serve to make the state more resilient for the years ahead. It is impossible to account for the multiplication of those dollars from this social and resilience asset standpoint using traditional economic models. The funding enabled the development of new networks and strengthening of existing networks, knowledge sharing, and the establishment of norms that prioritized collective well-being and support for vulnerable populations and local businesses. These intangible benefits contribute to building long-term resilience within communities, enhancing their ability to withstand and recover from future crises. VEE has demonstrated that not only does resilience involve absorbing shocks during crises but also adapting and transforming community relationships and food system infrastructure (Buzzanell, 2010; Massie & Heiss, 2025). Through its emphasis on local sourcing and decentralized decision-making, we see the Vermont food system evolving with support from governance.

Through the innovative model and programming of VEE, we see the co-production of public value coming into being by the operations of SEVCA, the Taskforce, the Hubs, and the feedback that was incorporated into VEE, agreeing with Alford (2002) and Head and Afford (2015). Leadership of VEE perceived the program to have successfully mobilized community assets and encouraged flexibility among institutions that were involved to overachieve the programs original and intended goals. Themes like improving service delivery of food aid and community building and empowerment shows a new narrative of equity and care that transcends beyond the direct goals of the program, agreeing with Buzzanell (2010) on how resilience helps to

reimagine the future during times of crisis or disruptions. These insights we gained from the study calls for a reconceptualization of program evaluation metrics, especially in food policy, from one that looks solely at quantitative outcomes to one that incorporates the social and emotional outcomes.

The perceived indirect impacts of the program on Vermont communities in a time of global health and economic crises revealed by the study is in congruent with Auerbach and Gorodnichenko (2012) who found that fiscal multipliers usually tend to be larger in economic recessions than in expansion. Again, we see this unmeasured multiplication of funds through these perceived indirect impacts of the program as agreeing with Sawyer (2017) where the multiplier effect in food system could be significant due to the interconnected nature of the food system; from production to processing to distribution and consumption. The emphasis of local content in the sourcing of produce for VEE meal producers also contributed to the multiplication of funds throughout the wider local economy, as also evidenced in Sustain Ontario (2012). The findings also agree with Christensen et al. (2017), Pender et al. (2019), Pender and Jo (2019), Canning and Stacy (2019) and Canning and Morrison (2019) that such programs have powerful multiplier effects that create significant economic impacts in local communities, especially during economic downturns (Canning & Morrison, 2019; Canning & Stacy, 2019; Pender & Jo, 2019; Pender et al., 2019).

3.5.3. Practical Implications

This research will be valuable to policymakers, emergency management professionals and food systems stakeholders because it offers insight into how innovative

programs like VEE can give off benefits that transcend beyond the direct measurable goals of the program. This study contributes to how emergency feeding programs like VEE can be leveraged effectively in addressing food insecurity around the world as it offers a replicable framework for future emergency feeding programs through its focus on design, partnership and community-centeredness. The analysis of the perceived indirect impact of the VEE program reveals the limitations of relying solely on economic models to evaluate the impact of crisis relief funding. Evaluation frameworks should be developed to capture the multidimensional impacts of relief funding, including measures of social cohesion, community resilience, and long-term preparedness. Decision-makers can make more informed choices and allocate resources in a manner that maximizes the overall resilience and well-being of communities by recognizing and valuing these intangible benefits,

Policymakers and decision-makers should recognize that such programs have the potential to generate resilience and societal benefits like improving service delivery of food aid programs, building and empowering communities, and breaking silos and forming partnerships for growth, that far extends beyond their immediate financial impacts. To fully harness the multiplier effect of economic programs, funding structures and policies should incorporate mechanisms for fostering community engagement, collaboration, and capacity-building in their target jurisdictions and even beyond. As such, policy makers should model these economic impact programs to integrate participatory approaches that encourage developing and feeding on local networks, and foster resilience building alongside the financial assistance itself.

Emergency program management administrators and personnels, as well as food assistance programs, should model and implement programs to be inclusive enough to normalize food assistance, promote dignity and reduce the stigma associated with receiving aid or assistance. These programs in their implementation should incubate local leadership through the involvement and representation of people from a wide community of practice to foster cross-sector collaborations. It should aim to foster collaborations between governments, non-profits, for-profits, in multi- sectors.

3.5.4. Limitations

Even though this study provides insights into the perceived indirect impacts of VEE, it has some limitations. It uses qualitative data of VEE alone to make its findings and contributions to the body of research on emergency food program management, which even though could be generalized to emergency food program management, may not be applicable to other emergency food programs. Findings of the study are inferred from the perspectives of VEE leadership and as such, may not be fully representative of the views of the general populace in Vermont. Leadership views may be influenced by their roles in their various institutions as well as their advocacy roles to speak for the program in a positive light and as such may downplay the programs shortcomings in their recall of the program as the program has gained a celebrated status in Vermont and beyond. Again, interview responses are the perspective of those who accepted to be interviewed, and hence, even though at a huge number of 42, may be skewed to their views only, rather than the views of the entire population of people who were in charge of managing the affairs of VEE while it was in session. These program administrators

were not necessarily beneficiaries of the program, which may skew their views about the program.

Even though some of the rounds of interviews was done during the time VEE was in succession, the last round was done at a time where the program was long over and may cause recall bias in these stakeholder reflections of the program. Additionally, due to availability, some participants participated in only one round of interview, while others participated in more than one round of interviews. Moreover, the experiences and contexts of Vermont, especially in their demographic and policy landscape, may not necessarily be generalized for other states in the United States of America, and the rest of the world, as each state varies culturally, administratively, and in numbers. It is found that the culture and community spirit of Vermont allowed it to enroll and implement such a statewide program. While the study provides a rich qualitative analysis of these perceived indirect impacts of the program, it is not backed by quantitative study that measures the magnitude of these impacts or compares it with other jurisdictions.

Another key limitation is researcher bias. With qualitative research drawing more on the researcher, it is highly impossible to be completely objective. The researcher accepts that their view might have shaped how the data was coded and interpreted, creating a potential for researcher bias, and challenges in generalizing findings to a broader population. I acknowledge that my positionality as a researcher with certain identities and perspectives may influence the interpretation of the interviews. In coding and interpreting the interviews for this research study, I recognize the significance of my positionality as a researcher in shaping the analysis process. I aim to remain vigilant

against imposing preconceived notions or biases on the data and strive to let the participants' voices guide the analysis.

3.5.5. Future Research

Future research should try to measure the perceived impacts of Emergency Food Response programs in Vermont and in other jurisdictions as this study only tries to identify them and not measure them quantitatively. Future studies should aim to quantify not only the indirect economic impacts and other impacts of VEE and other (emergency) food programs but also the long-term effects on community resilience, food system infrastructure, and social equity.

Even though it is challenging to quantify the perceived societal impacts of VEE, there is the need for a more holistic understanding of the multiplier effect that results from funding and implementing such programs, an approach that goes beyond considering only the economic ripple effects of programs but also their potential to foster resilience, community empowerment and social cohesion. Quantitative measures of social capital and trust among VEE partner organizations are also future areas of research that could be explored.

Future research could also explore including the experiences and perceptions of dignity, equity, and stigma of broader stakeholders including meal beneficiaries, farmers, restaurant owners, food program management, state and non-state officials among others, to better understand the difference in their experiences. Additionally, one could conduct a longitudinal study of the effects of VEE post-pandemic on the community resilience and food systems of Vermont. Again, across states and countries, comparative studies could

be done to establish contextual factors that limit or amplify indirect impacts of such programs, and whether they are replicable in other jurisdictions. Lastly, research can be commissioned to study how state policies, especially in relation to food programming, have changed, or not, following the successes of VEE.

3.5.6. Conclusion

It is clear through this study that the Vermont Everyone Eats program initially designed to provide meals for Vermonters during a time of global health and economic crisis caused by the COVID-19 pandemic had several impacts that extends beyond mere provision of meals to Vermonters in need during a time of world health and economic crisis. It extended far beyond addressing food insecurity during the COVID-19 pandemic. The program generated community and economic resilience for Vermont through its collaborative and innovative model of integrating food security with economic development and community wellbeing. It reshaped Vermont by improving service delivery of food aid programs, fostering partnerships and relationships across multiple sectors, and building and empowering communities in Vermont. These impacts even though powerful, are indirect impacts because they were not the direct goals or benefits of the program. The perceived impacts of VEE even though unintended, are powerful outcomes that shaped food assistance policy and implementation in Vermont and will continue to do so in the future ahead. It shows how crisis response programs have the ability to become modes of transformation in communities. VEE will serve as a blueprint for future emergency response during disasters in the future.

3.6. References

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**CHAPTER 4: NAVIGATING THE CERTAINTIES AND UNCERTAINTIES:
EMERGENCY FEEDING PROGRAM MANAGEMENT AND FEDERAL
DISASTER RELIEF FUNDING**

4.1. Introduction

The essential uniqueness of each problem makes it uncertain for lessons from past experiences to be applied as new problems arise. The COVID-19 pandemic was a wicked problem, particularly in how it amplified uncertainties around the globe. The virus's constant mutations and evolving patterns of transmission created ongoing uncertainties about its behavior and impact (Christensen & Lægreid, 2020). COVID-19 interacted with various existing economic, social environmental and health systems in complex ways, making outcomes highly uncertain (Moon, 2020). Balancing public health measures with economic and social needs introduced additional layers of uncertainty in decision making across the world (Alford & Head, 2017; Grint, 2020).

Uncertainties are magnified in co-occurring crises. For example, when COVID-19 co-occurred with various other public health, economic and security issues, the uncertainties were further magnified (Christensen & Lægreid, 2020). The interaction between these multiple crises created new, unforeseen challenges, that increased overall uncertainty (Moon, 2020). There were uncertainties about the allocation of resources across multiple pressing needs. Interventions that are aimed at one crisis had several unpredictable impacts on other ongoing issues, amplifying uncertainty about outcomes (Peters, 2017; Termeer et al., 2015). These call for decision makers to embrace flexible,

iterative approaches to problem solving that can adjust to the rapidly evolving circumstances and new information (Head & Alford, 2015). It also calls for collaborative problem-solving and robust decision making in a highly uncertain world (Head & Alford, 2015).

While crises are filled with uncertainty, federal disaster relief authority's support within the US is designed to provide certainty. The emergency response financial support from the federal disaster relief authority is valuable to response and recovery efforts; however, its funding structure can also create uncertainty for communities. Kousky (2018) highlighted that federal disaster relief authority's disaster assistance programs offer a safety net for communities, which reduced short-term uncertainty about post disaster recovery resources and processes. On the other hand, he also found out that the availability of federal aid could create moral hazard, which potentially increases long term risks and uncertainties about long term community resilience, where communities rely on aid rather than investing in their own resilience. Highfield et al. (2014) explored how federal disaster relief authority's policies and support inclined local decision-making during recovery from Hurricane Ike. In their findings, while federal disaster relief authority's guidance did provide a framework for action, it also presented various operational uncertainties linked to funding timelines and eligibility criteria, which affects local recovery planning. According to Kousky (2018), further research is needed to understand how disaster aid influences long-term decision making with regards to resilience and local investments. Highfield et al. (2014) also calls for research that

examines how local planners navigate federal disaster relief authority's complex systems and how to tailor guidance to realities on the ground.

More research is needed to understand how communities are impacted and respond to these funding uncertainties during times of crisis (Moore et al., 2023; Windon & Hales, 2022). Specifically, the paper asks, how does federal disaster response funding create conditions of certainty and uncertainty during emergency response program design and implementation. **Beyond providing funding, what impacts did the VEE Leadership perceive federal disaster response funding structure as having on the design and delivery of the VEE emergency feeding program? How do organizations involved in the design processes navigate and respond to those certainties and uncertainties in their decision-making processes and the implementation of the program?**

4.2. Literature Review

4.2.1. Decision Making under Certainty and Uncertainty

Kale et al. (2019) define decision-making under uncertainty as one that is characterized by feelings of doubt and conflicts of interest which results in a block or delay in making choices between alternative courses of action. Broadly, uncertainty is defined with terms like imprecision, incompleteness, unreliability, ambiguity, errors, and subjectivity, among others. In the Cynefin Framework, Snowden and Boone (2007) use the levels of uncertainty to categorize situations into 'obvious', 'complicated', 'complex', and 'chaotic'. Due to the doubt, discomforts, and all the other negative feelings associated with uncertainty, it triggers the increased engagement of our cognitive abilities

to resolve ambiguity. Certainty on the other hand is defined to depict situations where there are known and predictable causes and effects of actions. It is often associated with ease, security, comfort, stability, and a reliance on rules that are already established or even best practices. In the Cynefin Framework, it is described as ‘obvious’ or ‘simple’ domain, as the relationship between the cause of an action and its effect or outcomes are understood easily.

The certainty or uncertainty of a situation would influence the behavior and performance of individuals facing those situations. Positively, certainty affords individuals to rely on established and proven procedures, routines, expertise, and solutions, which leads to faster decision-making and enhanced efficiency. The Krugger-Dunning effect suggests otherwise if overconfidence, oversimplification, or complacency sets in. This is the situation where the existence of certainty in situations can lead to moments of error when an unexpected complexity occurs (Kruger & Dunning, 1999). Uncertainty on the other hand is seen to stimulate the individual to a point of deeply engaging their cognitive ability to solve problems systematically and innovatively. This is also true in the Cynefin framework where complex and chaotic situations encourage experimentation and adaptive learning (Snowden & Boone, 2007). On the other hand, too much uncertainty without measures to tackle it could lead to stress, anxiety, and an inability to make decisions due to the fear of making the wrong decision.

There are a variety of responses communities and organizations use to plan for and respond to uncertainty (Shafizadeh, 2024). Shafizadeh (2024) found that organizations use strategic adaptation (e.g., communication and leadership style),

operational responses (e.g., changes to supply chains or innovative practices), and organizational learning (e.g., information gathering and organizing). Rather than adapting to an uncertain situation, some organizations and communities engage in risk aversion, where they choose options that they perceive to come with lesser negative outcomes. Others choose to procrastinate. In this case, they delay the decisions or actions to take due to the discomforts associated with the uncertainty. Others may seek reassurance from other individuals, increase their vigilance to observe situations, and face difficulties in making decisions (Grupe & Nitschke, 2013; Perrykkad et al., 2021; Vives & FeldmanHall, 2018; Wang et al., 2024).

Organizations and communities also engage in information gathering to seek out more data to better understand the situation and reduce the levels of uncertainty (Grupe & Nitschke, 2013; Perrykkad et al., 2021; Vives & FeldmanHall, 2018; Wang et al., 2024). Even though uncertainty is associated with high levels of stress and anxiety, it leads to more innovative problem-solving approaches as individuals engage in more thoughtful processes to reduce uncertainty. Feeding programs during the pandemic reported seeing shifts in their operational response and community support during the COVID-19 (Patten et al., 2021). They also reported the initial shock of COVID-19 leading to increased information seeking related to regulations and public policies. They said that initial regulations and public policies were ambiguous, but over time they became clearer and easier to apply (Patten et al., 2021).

Similar to uncertainty, certainty can also pose opportunities and constraints during emergency response. Certainty impacts how people think and act in the present, adapt their behavior, or plan for the future (Okten et al., 2022). Okten et al. (2022) found certainty to breed poor information-seeking and antisocial tendencies or behaviors. The overreliance on certainty causes people to become risk-averse to the point that when they need to take risks, they prefer to be in their comfort zones. For example, many people engaged in panic buying and food hoarding at the beginning of the pandemic in their belief that food was going to short which to them was certain to happen (Lehberger et al., 2021). Respondents in research on consumers in Oklahoma revealed that respondents neither agreed nor disagreed that they engaged in active information-seeking behaviors, showing how certainty in their existing beliefs affects how they seek information (Ruth et al., 2023).

4.2.2. Resilience in the Face of Certainties and Uncertainties

Resilience has become a growing topic of interest for researchers in diverse fields. Resilience is a process of navigating shocks through an ongoing management of capabilities within a community (Copeland et al., 2020). Resilience, the ability to adapt to challenges, encompasses the ability of a social system to recover from disasters or shocks. According to Buzzanell (2010), resilience is the ability to bounce back or be reintegrated after difficult life experiences. She emphasizes that resilience is not only about bouncing back but creating a new normal or reality through communication, interaction, and material considerations.

The shocks and disruptions that communities face are uncertainties, both known and unknown, that disrupt the normalcies that these communities are familiar with. Due to the complexity and limited control one has on disruptions of systems, it is important that the resilience efforts of communities to adjust and adapt to changes becomes a multidimensional continued effort. Snowden and Boone (2007) through their Cynefin Framework suggest that resilience is fostered in uncertain and complex situations through experiments, collective learning, and adaptive strategies (Snowden & Boone, 2007). Resilience can be enhanced under uncertainty when proactive problem-solving is encouraged through positive coping styles (Miller & Engemann, 2019).

Certainty on the other hand gives foundation to resilience through the creation of predictable structures that allow for effective and efficient responses when things are stable (Kapucu & Van Wart, 2006; Miller & Engemann, 2019). Miller and Engemann (2019) and Kapucu and Van Wart (2006) both emphasize how important adaptive strategies are in building resilience in the face of uncertain events. Balancing and effectively managing the interplay between certainty and uncertainty promotes immediate and long-term stability and adaptability.

4.2.3. The Cynefin framework

Certainties are the events or situations that are very likely to take place. It is a state of being completely confident that an event will happen. Uncertainty on the other hand are the events and situations for which we are unsure about the likelihood of the event occurring. Uncertainty is a state of limited knowledge, which results in the inability to tell the current state of things. The Cynefin framework, introduced by Snowden and

Boone (2007), offers a comprehensive model for classifying uncertainties into known-knowns, known-unknowns, unknown-knowns, and unknown-unknowns, providing a structured approach for organizations to navigate complex decision-making landscapes. Thus, this paper will dwell on the framework to analyze the data and show how resilience was achieved by the organizers of the VEE program. The data will be sorted into the various domains of the Cynefin framework.

The framework has five domains: clear, complicated, complex, chaotic, and a center of confusion/disorder. For ‘complex’ and ‘chaotic’, cause and effect are not known and cannot be discovered. Rather, we can try and deduce them only in hindsight, after the effect has happened. For ‘clear and ‘complicated, we know the cause and effect or can discover them. The ‘clear’ domain is the “known knowns. It is characterized by best practices or rules in place, stable situations, and a clear cause and effect relationship. Here, you “sense (establish the facts), categorize, and respond” by applying best practices. Decision-making lies in the realm of reason. One must make sure they do not become complacent or oversimplify the situation.

The ‘complicated’ domains are made up of the known unknowns. With this, there is the need for expertise or analysis to be able to tell the cause-and-effect relationship of such situations. The rule is to “sense (assess the facts), analyze and respond by applying good operating practice. The ‘complex domain in the framework is characterized by “unknown unknowns”. There are no right or wrong answers here, and cause and effect relationships can only be told in hindsight or retrospectively. The rule is to “probe, sense

and respond”. The ‘chaotic domain of the framework events are too confusing to wait for a knowledge base response. The rule is to “act, sense and respond”. Any action at all is the go-to answer before one tries to process the situation and respond to it. The ‘confusion’ domain at the center of the framework is a point where it is uncertain which of the domains apply. In such cases, we do not know the nature of the issue at hand, requiring a gathering of information to determine the domain and the appropriate response. It is recommended to break down the issue into smaller parts and assign them to the other four domains, after which one can make decisions contextually.

The COVID-19 pandemic was a chaotic situation which brought with it many underlying societal issues, including food insecurity. Many emergency feeding programs were rolled out across the globe. One such program is the Vermont Everyone Eats program. This paper tries to find out how federal emergency funding creates conditions of certainty and uncertainty during emergency response program design and implementation. **Beyond providing funding, what impacts did the VEE Leadership perceive federal disaster response funding structure as having on the design and delivery of the VEE emergency feeding program? How do organizations involved in the design processes navigate and respond to those certainties and uncertainties in their decision-making processes and the implementation of the program?**

4.2.4. Emergency Feeding Program, Vermont Everyone Eats

This paper looks at how leaders of a federal disaster response authority funded, state-wide COVID-19 response program, Vermont Everyone Eats (VEE), anticipated and responded to varying degrees of certainty associated with the pandemic and federal

disaster response funding. Launched in August 2020 (VEE Economic Analysis, 2023), the VEE was an emergency feeding program designed to address food insecurity to support community resilience (Vermont Business Magazine, 2023). The VEE program was funded by the state of Vermont and the federal disaster response authority (VEE Economic Analysis, 2023). VEE distributed over 3.6 million meals between August 2020 and March 2023, leveraging more than \$46 million in federal COVID-19 relief funding (Massie & Heiss, 2025; VEE Economic Analysis, 2023).

VEE was a multifaceted emergency program addressing food insecurity, economic development, and local agriculture in Vermont (VEE Economic Analysis, 2023). The program provided nutritious prepared meals to Vermonters in need, while simultaneously boosting the local economy by keeping local restaurants, food producers, and farmers in business (VEE Economic Analysis, 2023) at a time of general economic crises associated with the pandemic. VEE operated using a unique cross-sector approach which engaged local restaurants to prepare meals with locally sourced ingredients for Vermonters who were experiencing food insecurity or found it harder to get food due to the COVID-19 pandemic. Beneficiaries of the program did not need to show proof of the need to be able to access the program. Southeastern Vermont Community Action (SEVCA), the main administrative body, guided the formation of a Statewide Task Force, which comprised of representatives from various agricultural and economic development agencies and boards, hunger relief organizations and restaurants. (VEE Economic Analysis, 2023). There were fourteen Community Hubs across the state of Vermont that

coordinated the production and distribution of meals at the community and local levels (Massie & Heiss, 2025; VEE Economic Analysis, 2023).

VEE's impact extended far beyond its food security goals. With an economic multiplier effect of \$78 million, \$10.1 million in private investment by restaurants, farms, and food producers, improved economic resilience which retained over 400 full-time employees, the establishment of new partnerships between farmers and restaurants, and enhanced community cohesion among others, the successes of the program can only go on (VEE Economic Analysis, 2023). VEE's successes demonstrate how effective a collaborative integrative approach to addressing (Massie & Heiss, 2025) complex societal issues like food insecurity can be. Following the program in March 2023, many other local initiatives have been inspired to continue in similar efforts using VEE's innovative model.

As an emergency response program, VEE stands out compared to other food programs due to how it uniquely and innovatively addresses food insecurity together with supporting local economies (VEE Economic Analysis, 2023). In its design and implementation, VEE was designed to support individuals facing food insecurity, local restaurants and farmers in Vermont. Over \$34 million revenue was generated by participating restaurants and more than \$3.5 million for local farmers and food producers (VEE Economic Analysis, 2023). VEE was a community-based implementation program. Hubs across all 14 counties in the state were put in charge of the day-to-day running of the program. Through the oversight of the hubs, restaurant quality meals were distributed to Vermonters facing food insecurity at the time, which not only addressed nutritional

needs but also offered a sense of dignity and normalcy to recipients. The program created a multiplier effect that stimulated additional economic activities beyond the initial investments, which was crucial during a time when many businesses faced various forms of financial uncertainty and closures. Even though a temporal emergency measure of addressing food insecurity during a time of the COVID-19 pandemic, VEE brought to light the gaps in the existing food security system and demonstrated the potential for collaborative cross-sector solutions (Massie & Heiss, 2025).

Vermont's community culture played a significant role in their response to the COVID-19 pandemic, especially in initiatives like the Vermont Everyone Eats (VEE) program (Sawyer, 2017; Whitehouse et al., 2023). Known for its strong sense of community, Vermont has a history of coming together to support neighbors in times of need. This communal spirit was exemplified during the pandemic as individuals, organizations, and businesses rallied to address the challenges brought about by the public health crisis. The VEE program, rooted in Vermont's culture of community empowerment and collaboration, resonated with the values of mutual support and solidarity that are deeply ingrained in the state's social fabric, valuing local food systems and collective well-being. Vermonters have a tradition of valuing local food systems, sustainability, and collective well-being, making the VEE program a natural extension of these shared values. The program not only provided essential support to individuals experiencing food insecurity but also reinforced the interconnectedness of Vermont's communities and the importance of working together to overcome adversity resilience (Massie & Heiss, 2025; VEE Economic Analysis, 2023).

4.3. Research Methods

This study employs a qualitative research design to understand how the certainties and uncertainties surrounding federal disaster response funding impacted a state food response program aimed at reducing hunger and boosting the local economy. Qualitative research is a method of inquiry that focuses on understanding human experiences, behaviors, and interactions in their natural settings. It is characterized by its emphasis on exploring the depth and complexity of phenomena through the collection and analysis of narrative data (Creswell & Poth, 2016). Qualitative research involves the studied use and collection of a variety of empirical materials – case study, personal experience, introspective, life story, interview, observational, historical, interactional, and visual texts – that describe routine and problematic moments and meanings in individuals’ lives (Denzin & Lincoln, 1994). This approach is particularly effective for uncovering rich, detailed insights and generating a comprehensive understanding of specific contexts, making it ideal for examining social programs such as the Vermont Everyone Eats (VEE) program. This approach was chosen to capture the diverse perspectives and experiences of participants involved in the program, including state officials, beneficiaries, organizers, and other stakeholders.

4.3.1. Participants

After obtaining human subject research approval, participants for the study were selected from across several organizations and individuals who were engaged in the administration, coordination and implementation of VEE, with varying levels of engagement in the program. We obtained a list of Hub and Hub directors which was made public on the VEE website and emailed those individuals. Thirty-two (32) of them

agreed to interview with us, of which some of them participated in more than one (1) rounds of interviews. They included community leaders, disaster response coordinators, local government officials, NGO representatives, and community members, among others. Specifically, participants for this study are state government officials, nonprofit administrators, members of the Taskforce, and Hub officials. All the people who had had a role to play in the planning, organizing and implementation of VEE were included in the pool of potential interviewees. **Table 1** shows the list of participants.

4.3.2. Recruitment

These participants were contacted via an email, inviting them to show their interest in being interviewed by filling a survey, and scheduling a time to be interviewed. Due to varying reasons including interest and availability to be interviewed, only those that replied to the emails in the affirmative were contacted for the 45-60 minutes interviews. Some of the participants participated in various rounds of the semi structured Interviews.

4.3.3. Interviews

The primary method of data collection involved conducting semi-structured interviews with key stakeholders within the operation of VEE. Semi structured interviews were conducted to gather the lessons that were learned from the VEE program. According to Bernard (2017), semi-structured interviews are a qualitative research method where the interviewer follows a predetermined set of questions but is also free to explore additional topics that emerge during the conversation. This method allows for a flexible and in-depth exploration of participants' experiences and perspectives, providing

rich, qualitative data that is crucial for understanding complex issues. It allows for other follow up questions to emerge from the interview, aside the planned follow up questions of the interview. These semi-structured interviews were instrumental in uncovering nuanced insights into the program's implementation and outcomes while ensuring that key topics were covered consistently across all interviews. The interviews were conducted on Microsoft Teams, which allowed for recording and transcribing of the interviews. There were three rounds of semi structured interviews. Some of the participants participated in only one round, with others participating in more than 1 round.

4.3.4. Data Analysis

The qualitative data collected from the semi-structured interviews went under thematic analysis. The data was then coded and categorized using NVivo 14 software, a qualitative data analysis software to facilitate a systematic analysis of the data. This process involves finding patterns, themes, and categories within and across the data (Braun & Clarke, 2006; Clarke & Braun 2017; Owen, 1984, 1985). To qualitatively analyze the data, NVivo 14 was used. From the NVivo software, I used the Import menu to import the Teams Transcripts files from the folder I created for them on my computer to the software. I then read through the uploaded files on NVivo to familiarize myself with the data (Braun, & Clarke, 2006) at which point I was making notes too.

Each individual interview file was then coded on NVivo 14, where sentences or fragments of ideas are assigned either to a new code or to existing codes. Codes were allowed to emerge from the data, within and across transcripts. During this time, my

research teammate and I were having joint meetings with our advisor to discuss thoughts and ideas on the data and compare notes. The data was then categorized with the aid of hierarchical coding or coding trees to help identify and generate initial themes across data points. Themes are patterns that captures something significant or interesting about the data in relation to the research question. The initial themes were then shuffled around several times until major and forceful repeating and reoccurring categories evolved that could address the research question (Braun, & Clarke, 2006; Owen, 1984). In the analysis, quotations from both Hub and Taskforce participants are included to honor the voice of the interviewees.

4.4. Analysis

This study sought to explore the impact VEE Leadership perceived the federal emergency funding and associated funding structures as having on the design and delivery of the VEE emergency feeding program. **In this section, I describe participants' experiences of certainty and uncertainty that they associate with federal disaster response funding, as well as the perceived impact on VEE organizing and community impact.** Findings based on a thematic analysis of 42 interviews **with VEE leadership and organizers, I argue that federal emergency funds had more than a financial impact on the organization and its ability to contribute to the resilience of communities. Specifically, VEE leadership saw the federal emergency funds as essential to their ability to design and implement VEE programing. However, funding structures associated with the 3-month renewal created both certainties and uncertainties that hindered the VEE program's design and response.**

4.4.1. Creating Funding Certainties

The ability to secure federal emergency response funds was of the utmost importance for VEE as it supported Vermont’s resilience to the pandemic. VEE was an expensive feeding program that required federal support to operate at the scale and scope needed to address state-wide food insecurity and provide economic hardship properly. **The primary function of the funds was to provide the financial resources needed to plan, mobilize, and implement VEE. Consistency in funding structures regarding how to secure and manage the funds allowed VEE to design a program for quick rollout and sustained operation. However, even operating within the boundaries of certainty of funding, VEE leaders had to manage uncertainties created by the funding simultaneously.**

4.4.1.1. Designing for Certainty

VEE’s design required advanced knowledge of the policies associated with emergency federal funding. Monica recalled how getting a source of funding for the statewide program became a stumbling block, presenting uncertainties to the rollout of the program. She said, “That hadn't been created when the flooding happened, and one of the first stumbling blocks was at the state level was the question of, OK, this is great, but how are we going to fund it?” Neil, who was not a member of the pilot team, but had prior experience responding to an emergency caused by Tropical Storm Irene, recalled the event similarly: “The pilot for Everyone Eats in Brattleboro came to my team and said: “Hey, can federal emergency response authority pay for this?”” The pilot team, which later became Task Force members, was uncertain about the exact rules for securing and administering emergency response funds. Instead of learning the complicated policies

anew, they networked with people who knew the federal disaster response authority's regulations based on past emergency response efforts. Beck, a Taskforce member, explained that "having folks that were involved with Irene... [has] been instrumental in helping us navigate the [federal emergency response funds] world."

Information sharing and seeking provided certainty when making early-stage decisions regarding the design of the program. Knowledge of eligibility rules impacted the design of the organizational structure of VEE. Beck explained, "We made some decisions early on, such as not housing the program inside a state government, otherwise we would have been ineligible... That was like, Okay, yeah, do that." The pilot group decided to house the program in SEVCA, a non-profit. Selecting a non-profit created an avenue for centralization of efforts and an entity to be accountable for managing contracts, overseeing cash flows, and coordinating efforts at reporting about the program across the state.

In addition to deciding SEVCA would administer the program, the pilot group consulted with individuals who had prior experience to determine the best type of funding to pursue. Neil explained, "Initially, it [the pilot group] was a grant to SEVCA. And we said, no, no, this needs to be a contract." Opting for a contract with the federal disaster response authority was a strategic decision that allowed VEE to purchase meals from local restaurants and distribute them efficiently, avoiding the bureaucratic delays thought to be associated with grant funding. Because the state was a federally declared disaster, a contract ensured those expenditures would be fully covered as part of the federal disaster response authority's disaster response mission. Neil said that based on

the decision to apply for a contract, VEE “got it [VEE] to qualify at 75% eligibility, and then eventually it became 100% reimbursable.” The contract ultimately provided VEE with the funding, structure, and speed necessary to meet immediate hunger relief needs while simultaneously supporting local economies and fostering long-term community resilience.

In both examples, Taskforce members relied on other’s knowledge of funding eligibility rules to make swift decisions regarding VEE’s organizational structure. The decision to add SEVCA to the application helped VEE to secure funding more quickly than it would have. Securing funds quickly enabled the program to launch rapidly, helping to address hunger and economic hardships sooner.

While members recognized the importance of careful planning and review, they also felt that the uncertainties around how to navigate the funding process slowed them down. Collin, a hub manager, recalled, “I think the only hindrance... was just in the very beginning, the legalities of technicalities... I think probably more so than the bureaucracy of it. Just getting, getting through the legalities of it all.” Still, he acknowledged that some level of bureaucracy was necessary, especially when dealing with federal funding. “I understand that from a legal point and grants. These things had to happen,” he said. “But I feel like we were ready to go.” Collin added, “I don’t think anyone expected us to be able to just pick up and like go like that...it was more of a frustration of being ready to go, but not able to go at a full sprint, like we wanted to yeah. And not being able to just roll straight through.”

4.4.1.2. Sustaining Funding.

Securing emergency funding initially gave organizers a sense of certainty that fueled hope and momentum for planning and implementation. Yet, under federal guidelines, this support was subject to three-month renewal and review cycles, adding a layer of uncertainty. In the unpredictable context of the pandemic, this provisional certainty empowered SEVCA and the VEE leaders to make timely decisions, secure food from local producers, and maintain trust with participating restaurants and organizations. This ability to balance immediate action with ongoing adaptation enabled VEE to continue expanding its impact and reach, even as uncertainties about long-term sustainability and reimbursement remained.

From the start, organizers understood the need to renew funding every three months, prompting them to prioritize data collection and documentation early to strengthen each renewal request and demonstrate the program's effectiveness. When reflecting on why VEE was able to operate for several years, Monica, a Hub manager, said, "[it took] thousands of people and then 10s of thousands of meal recipients as well." For Monica VEE's success was a matter of people working together. The continued funding success was based on its ability to provide funding based on reimbursable receipts. Similarly, Beck said, data was important to the ongoing operations of VEE. He explained, "That process is obviously SEVCA. A lot of the big lift to get all that paperwork together, but they held our hand in that we were doing it." Beck honored SEVCA's role in collecting and reporting on data. He said that they worked with lawyers to increase their certainty that they were handling the data correctly. He said, "We feel a little bit more secure in our decision, the decisions that we're making, and they [lawyers]

also helped us with filing the paperwork and holding our hand all the way.” His comment highlights a central administrator to manage data provides some level of certainty when re-applying for funding, but expert legal is also critical in feeling certain in your ability to contribute to a community’s long-term, complete recovery.

The demonstration of compliance and impact was as important as the delivery of the meals to beneficiaries. Administrators strategically collected data, instituted reporting and documentation mechanisms to align with funding renewal and their deadlines. They made sure that information about the day-to-day operations of the program, meals distributed, dollars spent, participating restaurants, local sourcing and food purchases, and community reach was gathered continuously and easily accessible, and embedded into their program. Vera said, “About number of households, number of people per household, ages. We don't collect any names or anything like that, but the distribution sites compile that data. They send that to another woman who works for my organization who's an epidemiologist. She compiles that data, gives it to me and then I submit it to SEVCA.” Restaurant partners were required to provide the appropriate information on a timely basis. Remi said, “That has helped us keep this program going...The restaurants that we've landed on now are like fantastic they invoice mostly on time, which is really helpful. Like just having people kind of be like the resource of like positivity and buy in like.” This shows how important collection of accounting data was to program administrators.

This foresight to collect data about meals distributed not only improved the efficiency and quality of renewal applications but also strengthened internal

accountability and program transparency. By building documentation into the fabric of implementation, VEE positioned itself to have increased certainty that the program would meet the federal disaster response authority's administrative expectations, and they would maintain funding continuity. Neil noted that persistence, patience, and clear communication were essential when working with the federal funder. He found agency in the administrative tasks associated with maintaining funding. He said, "If we can make the case to the federal disaster response authority as to why our response is appropriate and ultimately cost-effective, and we're looking towards resilience solutions, we can get the federal disaster response authority to say 'yes.'" Though the renewal process felt uncertain, He felt confident that if they made a sound argument with evidence, the program would remain intact. Neil said that based on his experiences with the funding agency, "We basically had to make sure that the T's are crossed and the I's are dotted for eligibility." Consistency in funding structure rules and eligibility was helpful, but the administrative tasks of submitting and having the right paperwork reviewed created uncertainty that slowed the program's services.

4.4.2. Managing Funded Uncertainties

While federal emergency funding gave organizers and communities a degree of certainty with regard to their ability to address the pandemic disruptions, it also introduced new layers of uncertainty that extended beyond the challenges of the pandemic and constrained the response effort. Program managers had to navigate uncertainties as the program was rolled out and during its life span. Most of these uncertainties were due to the three-month renewal periods for the funding.

Three-month renewal cycles posed a challenge for the Taskforce and Hub leaders' ability to plan for sustained community resilience. Program administrators had to operate in constant provisional planning because funding was not assured beyond each short cycle. Ben, a Taskforce member, explained the impact of the three-month funding cycle on VEE's emergency response:

I know it was a real challenge for the folks who are running the hubs and for the, the coordinator down at SEVCA. Just the communication of, "well, we might be, you know, funding might run out next month, but we're trying to get some more, but you have to be ready to turn off the spigot on this date.

The looming possibility of funding not being renewed, bred cautious decision making and a preference for short-term strategies against their long-term counterparts.

The repeating 3-month cycles of uncertainty regarding funding made it difficult for VEE administrators and stakeholders to make long-term strategic plans and build sustained partnerships. VEE administrators had to constantly balance ramping decisions and continued operational decisions. Ben said, "for every time it looked like the program was going to run out of funding, Umm, we had to scramble and find alternative ways...find ways to keep those meals going." He continued, "Where's the funding going to come from? Is somebody going to float that until we find out if there's going to be another tranche of funding coming into that program?"

The three-month funding cycle was also difficult for sustaining partnerships with restaurants. Ben said that it was hard when "funding comes in spurts like... opposed to having some more clarity in moving forward." Zeynep explained that "for businesses,

you have to be able to plan further out for that loss of revenue.” If VEE lost emergency response funding and was forced to stop the program immediately, the businesses would lose revenue and incur the costs of the program without federal support. VEE leaders reported feeling very concerned about what would happen to the immediate and long-term resilience of their communities if that happened. Bella said, “having it [funding] broken up into three-month sections was unavoidable this time, but that made it really difficult for people to plan and actually adapt.” For example, Ziggy, a Hub manager, said that without reimbursement for VEE meals, restaurants would not be able to afford payroll. Restaurants were pivotal to the distribution of meals; however, keeping them involved was difficult if VEE administrators could not promise reimbursement next month. Similarly, Zeynep, a Hub manager, said, “‘We think it's going to be extended for another three months, but just stand by,’ and then it would be approved, and then we'd have a week to scramble to make sure it continues.” The cycle of reapplying, anticipation, and then scrambling to apply funds was demanding.

To respect the vulnerability of their restaurants and clients, VEE was open with stakeholders about the program’s uncertain three-month funding cycle. Bella recalled, “There were so many times during Everyone Eats in which we were communicating with restaurants where we were like, ‘We don't know if funding is gonna continue.’ And then, like, ‘We would get three more months of funding.’” Repeated warnings regarding these uncertainties took a toll, requiring emotional labor from stakeholders. Grace explained that, “So VEE almost came to an end, I don't know, maybe 10 times, and so it was very stressful, and there was ongoing uncertainty, and that was very difficult.” Similarly,

Zeynep described, “We all got pretty good at it [coping with the uncertainty cycle], but it kept people in a state of uncertainty having to have that three-month segment.”

Over time, the repeated cycle of uncertainty and emotional labor became normalized, creating a false sense of security that made it difficult to end VEE. It was difficult to clearly communicate the program’s eventual end. Bella explained, “Finally, you know, it was like the real end, but it was very hard because we had done it so many times to be like, 'No, really, this is the end, end.’” Likewise, Ben said, “The program actually ramped down multiple times and then ramped back up again...It was hard to get people's attention to talk about the challenges of, of pulling and then giving back funding multiple times”. Because VEE had repeatedly warned of possible funding cuts that never materialized until the final announcement, many stakeholders assumed the funding would continue. As a result, the message that the program was truly ending did not create the sense of urgency needed for a smooth transition. Bella reflected on how this cycle impacted business and clients when the program finally ended. She said, “I think some restaurants got it, but then for some restaurants, it was very hard to like, actually totally realize that it was the end.” Some restaurants and clients made alternative plans, while others struggled to accept or act on the reality that they would need new ways to access food or sustain their businesses.

The continuous three months cycles of uncertainty impacted the ramping down of the program. Grace, a Taskforce member said, “There was a lot about bringing VEE to an end that was out of everybody's control.” She explained that uncertainty about when funding would end created uncertainty about how to end the program and bounce forward

from the pandemic. After the federal emergency was declared over, there was talked about if the state would cover some of the costs associated with VEE programing. Grace said that eventually the cycle of uncertainty ended. “And then after saving it and pulling it back from the brink so many times to actually have it come to an end was very painful for people. SEVCA handled bringing it to an end as best they could.” Ben said, he had “sympathy for what legislators were going through during that time. It was a really challenging time for everyone.” Ben’s comment empathizes with the sources of funding despite them causing uncertainty at the end of the program.

4.5. Discussion

Communities must navigate uncertainty as they experience and respond to crisis. While the emergency response financial support the federal disaster response authority provides is valuable to response and recovery efforts, its funding structure can also create uncertainty for communities. Emergency response funds are available to provide structure for communities and individuals during these times and to support recovery. The COVID-19 pandemic was a chaotic situation which brought with it many underlying societal issues, including food insecurity. Many emergency feeding programs were rolled out across the globe, including the Vermont Everyone Eats program. In this study, I sought to understand how federal disaster response funding created conditions of certainty and uncertainty during emergency response program design and implementation. I sought to understand what impacts VEE Leadership perceived federal disaster response funding structure as having on the design and delivery of the VEE emergency feeding program. I looked at how organizations involved in the design

processes navigated and responded to those certainties and uncertainties in their decision-making processes and the implementation of the program. This section

How the emergency response funding program was structured created both certainty and uncertainty during times of crisis, as evidenced by the VEE program launched during the COVID-19 pandemic. The VEE program faced significant challenges due to the uncertainty surrounding federal disaster response funding timelines and renewal processes. federal disaster response funding, with its short-term cycles and uncertainty around renewal, created significant challenges for stakeholders in planning, adapting, communicating with partners, and ensuring continuity of services during the crisis. While the program faced significant uncertainties, the initial availability of federal disaster response funding provided certainty that enabled the rapid launch of VEE to address food insecurity in Vermont during the crisis.

4.5.1. Theoretical Implications

The findings of this study shows that funding is crucial to programs, especially ones as huge as the statewide VEE. The study shows that while the emergency response financial support provided was valuable to response and recovery efforts, especially during its swift roll out, its funding structure simultaneously created uncertainty for VEE organizers, with funding for the program being renewed after every three (3) months during the time the program was administered. It was however not certain whether the funding would be extended when the three months were running out. This created an avenue for delayed planning and decision-making on the part of SEVCA, the restaurants, the hub, and all other partners. As such, the leaders of VEE had to anticipate and respond

to the varying degrees of uncertainty that were associated with the funding for the program. These uncertainties surrounding funding timelines, eligibility criteria, or regulatory hurdles created a ripple effect of confusion, delays, and breakdowns in coordination that reduces communities' ability to respond effectively to the food crisis that escalated during the COVID-19 pandemic. These certainties and uncertainties extend far beyond the funding itself. It extends to the food system in Vermont, the charitable food system in Vermont, labor, and social sustainability among others, during a time of crisis.

Through the analysis of 42 interviews, the study sought to understand what impacts VEE Leadership perceived federal disaster response funding structure as having on the design and delivery of the VEE emergency feeding program. The findings are consistent with Kousky (2018) who highlighted that federal disaster response authority's disaster assistance programs offer a safety net for communities, which reduced uncertainty about post disaster recovery resources and processes but could however create moral hazard, which potentially increases uncertainty about long term community resilience. The findings of the study are consistent with Snowden and Boone (2007)'s Cynefin Framework, which shows that the behavior and performance of individuals are influenced by the certainty or uncertainty of situation that affects them. We see how VEE officials are afforded certainty through their reliance on established and proven procedures, routines, expertise in the areas of disaster management, which are all applied in the implementation of VEE. The certainty of a somewhat continued funding after every three months however bred an overreliance on the continued funding such that the

final cessation of funding came a bit unexpected to program administrators, at a point where they wished funding will continue for a while. This is very consistent with the Krugger-Dunning effect, situation where the existence of certainty in situations could lead to moments of error when an unexpected complexity occurs (Krugger & Dunning, 1999).

According to the Cynefin framework, complex and chaotic situations encourage experimentation and adaptive learning (Snowden & Boone, 2007). Some organizations and communities also engage in information gathering to seek out more data to better understand the situation and reduce the levels of uncertainty (Grupe & Nitschke, 2013; Perrykkad et al., 2021; Vives & FeldmanHall, 2018; Wang et al., 2024). From VEE, we see program administrator creating VEE as an innovative emergency program where beneficiaries are dignified through their self-proclamation of need, and community experts engaged to suit the program to the specific food needs of each county, among others. VEE program administrators engaged in rigorous program data collection at every stage of the program, from meals distributed to businesses and farmers engaged, and shared this information in their various reports (VEE Intermediate Report, VEE Economic Analysis, Participant Survey Report, Restaurant Reports) for future use and reference by others. VEE administrators engaged in various information seeking habits including the institution of a Taskforce that met regular to discuss the operations of the program, and ways to better the program with the expert knowledge they had from their fields of work. The fourteen (14) hubs also met regular to discuss the program during its implementation.

The information seeking behavior was also very instrumental in the continuous funding of the program as it served as evidence of the effects of the program on Vermont communities. On the other hand, too much uncertainty without measures to tackle it could lead to stress, anxiety, and an inability to make decisions due to the fear of making the wrong decision. We see VEE leadership stressed with the uncertainties that surrounded funding for the program, experiencing great anxiety when the three months window was about expiring. They were unable to plan to the very long-term as funding was not directly assured for the next three months. Moreso, a lot of efforts had to go into numerous short-term planning than they would have spent if they were able to plan for longer terms. Vermonters adapted and adjusted to the COVID-19 through the implementation of VEE as their coping style and solution for navigating the pandemic, creating a VEE that has become a model emergency program today and building resilience in their communities. This is consistent with Miller and Engemann (2019) where resilience could be enhanced under uncertainty when proactive problem-solving is encouraged through positive coping styles, and Snowden and Boone (2007) where resilience is fostered in uncertain and complex situations through experiments, collective learning, and adaptive strategies.

On the other hand, while the program faced significant uncertainties, the initial availability of federal disaster response funding provided certainty that enabled the rapid launch of VEE to address food insecurity in Vermont during the crisis. Moreso, the certainty that federal disaster response funding will be released, and the guidelines provided by the federal disaster response authority for its funding presented some form of

certainty to the leaders of the VEE program. Leaders could plan, coordinate, and direct the distribution of resources, and the implantation of the program itself (the distribution of meals). Certainties associated with federal disaster response authority funding allowed SEVCA and other stakeholders to confidently plan and mobilize resources for the emergency food program, fostering resilience through expanded networks, capacity-building, and long-term preparedness efforts. This produced a cascading effect, amplifying the positive impacts of the monetary aid by enabling coordinated responses, strengthening economic stability, and bolstering public trust. The findings are also consistent with Highfield et al. (2013)'s result from Hurricane Ike where he found that while the federal disaster response authority's guidance provided a framework for action, it also presented various uncertainties linked to funding timelines and eligibility criteria, which affects local recovery planning, that policymakers must navigate. The findings are also consistent with Shafizadeh (2024) where organizations use strategic adaptation, operational responses and organizational learning to respond to uncertainty. VEE leadership is seen to adapt VEE to suit the needs of beneficiaries in a time of crises. They provided community avenues for beneficiaries to engage with other individuals in a time where people stay alone in their homes. VEE strategically adapted and got used to the three (3) months funding cycle, ready for renewal at each open funding cycle. VEE conducted its operations with the statewide program decentralized to all fourteen (14) counties in the state, having hub directors in charge of recruiting and overseeing meal distributions, and SEVCA being the overall administrator and grantee of the program.

4.5.2. Practical Implications

This research will be valuable to policymakers, emergency management professionals, and food systems stakeholders. It offers insight into how innovative programs can effectively respond to complex crises by embracing varying degrees of uncertainty and adapting to changing conditions.

Policy makers through this study will gain insight regarding how funding can affect the design, implementation and effectiveness of programs, especially emergency feeding programs. This will help them to effect laws and policies that will ensure smooth run of emergency feeding problems, especially during a time of crises. This study will support the development of frameworks that are robust enough to support and ensure the continuity and resilience of emergency feeding programs especially in times of heightened need. Inculcating the findings and valuable insights to the field of community feeding programs, food security initiatives, and local food systems will enhance the impact and sustainability of similar programs aimed at addressing food insecurity and supporting local economies.

Administrators of food assistance programs can use the results of this study to better understand how they can navigate between the certainties and uncertainties associated with their source of funding in the design and implementation of such programs, to be better placed in their efforts to provide for the food needs of their beneficiaries. It will offer valuable lessons for improving the design, implementation, and management of emergency response programs, particularly those that aim to simultaneously address multiple systemic challenges.

Communities, clients, for profit businesses, nonprofits and other entities hoping to participate in such programs in the future would have a clear idea of some of the positives and negatives that may affect the emergency feeding program, and consequently, their object of business if they participate in such programs. A proportion of the certainties and uncertainties surrounding the program will ripple down to these entities depending on how it is managed by those program administrators directly involved with the program.

4.5.3. Limitations

This study has some limitations. It uses qualitative data of VEE alone to make its findings and contributions to the body of research on emergency food program management, which even though could be generalized to emergency food program management, may not be applicable to other emergency food programs. Interview responses are that of those who accepted to be interviewed, and hence, may be skewed to their views only, rather than the views of the entire population of people who were in charge of managing the affairs of VEE while it was in session. Additionally, due to availability, some participants participated in only one round of interview, while others participated in more than one round of interviews. These program administrators were not necessarily beneficiaries of the program, which may skew their view about the program.

Another key limitation is researcher bias. With qualitative research drawing more on the researcher, it is highly impossible to be completely objective. The researcher accepts that their view might have shaped how the data was coded and interpreted,

creating a potential for researcher bias, and challenges in generalizing findings to broader population. I acknowledge that my positionality as a researcher with certain identities and perspectives may influence the interpretation of the interviews. In coding and interpreting the interviews for this research study, I recognize the significance of my positionality as a researcher in shaping the analysis process. I aim to remain vigilant against imposing preconceived notions or biases on the data and strive to let the participants' voices guide the analysis.

4.5.4. Future Research

Future research should include both qualitative and quantitative data to be able to determine how planning and implementation of the programs was affected by the uncertainties and certainties as this current research is qualitative only. Again, future quantitative research should try to quantify the degrees of certainties and uncertainties surrounding emergency feeding programs, and their funding sources and mechanisms. Future research could also look at cost effectiveness and long-term impacts of emergency feeding programs, which could serve to argue for the roll out of such programs during a time of crises. Research could be done to investigate the administrative challenges that are faced in emergency feeding program management by administrators. Lastly, research could be engaged to develop and valid metrics that measure the performance of emergency feeding programs.

4.5.5. Conclusion

Through the experiences of the organizers of VEE, we see the complex interplay between certainty and uncertainty that surround the management of an emergency

feeding program. It shows that funding though positive, could present initial certainties by providing initial financial resources to roll out the program effectively. It can however also affect how the program plans, coordinates resource and prepares for the future as it navigates the uncertainties surrounding its funding. The necessity of three-month renewal cycles forced VEE administrators to operate with provisional strategies, balancing the need to scale services with the looming threat of abrupt program termination.

Implementation and design decisions, though strategically crafted to meet funding's expectations, were continually complicated by funding instability that impacted communication, planning, and the ability to build sustainable partnerships.

Despite these challenges, Vermont Everyone Eats demonstrated remarkable adaptability and resilience. The program's ability to leverage initial certainties, embed rigorous data collection into operations, and foster trust among partners and communities enabled it to deliver critical services during a time of great need. However, the continuous cycle of uncertainty shows the need for more stable and predictable funding mechanisms in future emergency responses. Emergency programs function best when administrators and stakeholders are empowered to plan beyond immediate horizons; to build not only rapid responses but also durable systems of support. The case of VEE illustrates that while communities can and do rise to meet uncertainty with innovation and determination, more consistent structures of support are necessary to truly maximize the impact of emergency relief efforts.

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CHAPTER 5: DISCUSSION

5.1. Introduction

Communities must navigate certainties and uncertainties as they experience and respond to crisis. The COVID-19 pandemic was a chaotic situation which brought with it many underlying societal issues, including food insecurity across the globe. Many emergency feeding programs were rolled out across the globe, including the Vermont Everyone Eats (VEE) program. VEE was an innovative emergency feeding program launched on August 1, 2020, through March 31, 2023, that responded to a set of complex challenges posed by the COVID-19 pandemic by providing nutritious meals to Vermont residents while simultaneously supporting local restaurants and farmers who were impacted by the economic disruptions caused by the pandemic. Generally, VEE has been perceived to have led to other economic and social impacts that cannot be directly measured and quantified aside the intended measurable goals and impacts of the program. There is also evidence that the Vermont Everyone Eats funds were amplified through a "three-legged stool" approach: supporting local restaurants, and food producers, and addressing food insecurity simultaneously (VEE Economic Analysis, 2023).

Through Chapter 3 of the study, I sought to understand what indirect impacts VEE Leadership perceived the program as having on Vermont communities, extending far beyond those direct benefits and impacts that were measured by program administrators in the various program reports. VEE was perceived by its leadership to extend far beyond the measured goals to include unintended ones like improving service delivery of food aid programs, fostering community building and empowerment, and

breaking silos and forming unlikely partnerships, which are broader structural, social and psychological benefits for all Vermonters. The program multiplied relief money to develop a statewide identity, new norms, and new networks that are difficult to quantify financially. The VEE program fostered a sense of community, collaboration, and resilience that extended beyond the immediate financial impacts. I argued that the relief money from the VEE program was multiplied in ways that cannot be fully accounted for within a capitalistic model. VEE reshaped Vermont, especially food assistance program policy and implementation, by improving service delivery of food aid programs, fostering partnerships and relationships across multiple sectors, and building and empowering communities in Vermont. It extended beyond mere provision of meals to Vermonters in need during a time of world health and economic crisis that came with the COVID-19 pandemic. VEE was perceived by leadership to have improved service delivery of food aid programs by fostering kindness and compassion among Vermonters, promoting dignity, and promoting equity and inclusion. It was perceived to have built and empowered Vermont communities by fostering cross-sector involvement, fostering community empowerment and fostering community networks. Additionally, VEE broke silos and formed unlikely partnerships through the forming of partnerships and relations, innovative problem identification programming, and building social capital and trust. These perceived impacts of the program are perceived by program leaders to have stayed on even after the program has ended.

While the emergency response financial support the federal disaster response authority provides is valuable to response and recovery efforts, its funding structure can

also create uncertainty for communities. Emergency response funds are available to provide structure for communities and individuals during these times and to support recovery. In Chapter 4 of this study, I sought to understand how federal disaster response funding created conditions of certainty and uncertainty during emergency response program design and implementation. I looked at how organizations involved in the design and implementation processes navigated and responded to those certainties and uncertainties in their decision-making processes and the implementation of the program. VEE program funding structuring (three-months renewal cycle) created both certainty and uncertainty during times of crisis. The program faced significant challenges due to the uncertainty surrounding federal disaster response funding timelines and renewal processes which affected stakeholders' ability to plan, adapt, communicate with partners, and to ensure the continuity of services during the crisis. Even at that, the initial availability of federal disaster response funding provided certainty that enabled the rapid launch of VEE to address food insecurity in Vermont during the crisis. Moreso, the certainty that federal disaster response funding will be released, and the guidelines provided by the federal disaster response authority for its funding presented some form of certainty to the leaders of the VEE program. The funding enabled the development of new networks and strengthening of existing networks, knowledge sharing, and the establishment of norms that prioritized collective well-being and support for vulnerable populations and local businesses. Leaders could plan, coordinate, and direct the distribution of resources, and the implementation of the program itself (the distribution of

meals). This final chapter discusses the theoretical implications, practical implications, limitations, future research and conclusion of the study.

5.2. Theoretical Implications

This research examined how leaders of VEE, a COVID-19 food relief program perceived the benefits and impacts of the program extending beyond the quantifiable measured goals of the program. The research also sought to understand how VEE Leadership anticipated and navigated certainties and uncertainties surrounding the funding of the program, and what impacts they perceived federal disaster response funding structure as having on the design and delivery of the VEE emergency feeding program.

From Chapter 3, VEE program leadership perceived the program to have multiplied funds beyond those that were directly measured in the program reports, impacts that were more intangible to measure. Program administrators perceived VEE to have improved service delivery of food aid programs by fostering kindness and compassion among Vermonters, promoting dignity, and promoting equity and inclusion. It brought Vermonters together in a lonely time of crisis, which was seen as a mental health component of the program. Administered equitably in all 14 counties of the state, the program was seen to have been inclusive and equitable to all Vermonters; catering to the diverse food need of people with new and existing food insecurity, with participating restaurants not left out. With clients not needing to show stringent proof of need, VEE provided dignity primarily to clients and participating NGOs as well, helping to shift perceptions around food assistance and reducing stigma associated with seeking help.

VEE was perceived to have built and empowered Vermont communities by fostering cross-sector involvement, fostering community empowerment and fostering community networks. There were multiple sectors, community groups, nonprofits and representation from government, all involved in the program. The program involved local communities at each step of the design, building it with the people in mind, and empowering communities to receive meals. Peer sharing of knowledge was encouraged, as existing and new networks were leveraged for VEE.

Additionally, VEE broke silos and formed unlikely partnerships through the forming of partnerships and relations, innovative problem identification programming, and building social capital and trust. The program was an innovative design for meals during the COVID-19 pandemic. Aside creating new forms of organizing for restaurants, VEE created an avenue for forming partnerships and relationships that broke silos. It built social capital and trust for Vermont with its Hub and Taskforce element, helping to build on existing resilience and other cultures in Vermont. All these intangible indirect impacts of the program shows that economic models like the multiplier effect is not enough to measure the outcome of a program aimed at boosting the economy. This agrees with Buzzanell (2010) and Houston et al. (2015) as these social and resilience assets would serve to make the state more resilient for the years ahead. It is impossible to account for the multiplication of those dollars from this social and resilience asset standpoint using traditional economic models. The funding enabled the development of new networks and strengthening of existing networks, knowledge sharing, and the establishment of norms that prioritized collective well-being and support for vulnerable populations and local

businesses. These intangible benefits contribute to building long-term resilience within communities, enhancing their ability to withstand and recover from future crises. VEE has demonstrated that not only does resilience involve absorbing shocks during crises but also adapting and transforming community relationships and food system infrastructure (Buzzanell, 2010; Massie & Heiss, 2025). Through its emphasis on local sourcing and decentralized decision-making, we see the Vermont food system evolving with support from governance.

Through the innovative model and programming of VEE, we see the co-production of public value coming into being by the operations of SEVCA, the Taskforce, the Hubs, and the feedback that was incorporated into VEE, agreeing with Alford (2002) and Head and Afford (2015). Leadership of VEE perceived the program to have successfully mobilized community assets and encouraged flexibility among institutions that were involved to overachieve the programs original and intended goals. Themes like improving service delivery of food aid programs and community building and empowerment shows a new narrative of equity and care that transcends beyond the direct goals of the program, agreeing with Buzzanell (2010) on how resilience helps to reimagine the future during times of crisis or disruptions. We see a reimagined food program that provides dignity to beneficiaries by ensuring food security without the stigma and other barriers associated with traditional food programs, that hinder people from accessing them. These insights we gained from the study calls for a reconceptualization of program evaluation metrics, especially in food policy, from one

that looks solely at quantitative outcomes to one that incorporates the social and emotional outcomes.

The perceived indirect impacts of the program on Vermont communities in a time of global health and economic crises revealed by the study is in congruent with Auerbach and Gorodnichenko (2012) who found that fiscal multipliers usually tend to be larger in economic recessions than in expansion. Again, we see this unmeasured multiplication of funds through these perceived indirect impacts of the program as agreeing with Sawyer (2017) where the multiplier effect in food system could be significant due to the interconnected nature of the food system; from production to processing to distribution and consumption. The emphasis of local content in the sourcing of produce for VEE meal producers also contributed to the multiplication of funds throughout the wider local economy, as also evidenced in Sustain Ontario (2012). The findings also agree with Christensen et al. (2017), Pender et al. (2019), Pender and Jo (2019), Canning and Stacy (2019), and Canning and Morrison (2019) that such programs have powerful multiplier effects that create significant economic impacts in local communities, especially during economic downturns (Canning & Morrison (2019); ; Canning & Stacy, 2019; Pender & Jo, 2019; Pender et al., 2019).

The findings of this study also indicates that funding is crucial to programs, especially ones as huge as the statewide VEE. The study in Chapter 4 shows that while the emergency response financial support provided was valuable to response and recovery efforts, especially during its swift roll out, its funding structure simultaneously created uncertainty for VEE organizers, with funding for the program being renewed

after every three (3) months during the time the program was administered. It was however not certain whether the funding would be extended when the three months were running out. This created an avenue for delayed planning and decision-making on the part of SEVCA, the restaurants, the hub, and all other partners. As such, the leaders of VEE had to anticipate and respond to the varying degrees of uncertainty that were associated with the funding for the program. These uncertainties surrounding funding timelines, eligibility criteria, or regulatory hurdles created a ripple effect of confusion, delays, and breakdowns in coordination that reduces communities' ability to respond effectively to the food crisis that escalated during the COVID-19 pandemic. These certainties and uncertainties extend far beyond the funding itself. It extends to the food system in Vermont, the charitable food system in Vermont, labor, and social sustainability among others, during a time of crisis. Program leadership designed for certainty, sustained funding, and managed funded uncertainties

Through the analysis of 42 interviews, the study sought to understand what impacts VEE Leadership perceived federal disaster response funding structure as having on the design and delivery of the VEE emergency feeding program. The finding is consistent with Kousky (2018) who highlighted that federal disaster response authority's disaster assistance programs offer a safety net for communities, which reduced uncertainty about post disaster recovery resources and processes but could however create moral hazard, which potentially increases uncertainty about long term community resilience. The findings of the study are consistent with Snowden and Boone (2007)'s Cynefin Framework, which shows that the behavior and performance of individuals are

influenced by the certainty or uncertainty of situation that affects them. We see how VEE officials are afforded certainty through their reliance on established and proven procedures, routines, expertise in the areas of disaster management, which are all applied in the implementation of VEE. The certainty of a somewhat continued funding after every three months however bred an overreliance on the continued funding such that the final cessation of funding came a bit unexpected to program administrators, at a point where they wished funding will continue for a while. This is very consistent with the Krugger-Dunning effect, a situation where the existence of certainty in situations could lead to moments of error when an unexpected complexity occurs (Krugger & Dunning, 1999). As such, individuals or organizations need to balance flexibility and stability, and awareness and reflection of their situations constantly to avoid complacency.

As organizations try to make the uncertain certain, they should constantly balance stability and flexibility with awareness and reflection. Awareness and reflection ensure organizations remain vigilant and responsive of situations as they happen. Reflections and structured feedback help to notice complacency when they set in at the early stages, in order to adapt approaches accordingly (Iserson, 2025; Ristyawan et al., 2025; Wei, 2024). VEE remained vigilant of the funding and other uncertainties and continuously responded to them by working strategically to maintain funding till the program's life cycle ended. Context-sensitive practices should be applied by organizations when dealing with situations, showing stability and flexibility (Iserson, 2025). According to Laser (2021), stability and flexibility function like a continuum, with a tradeoff between them. Even though stability and flexibility are both necessary and interdependent, hyper-

stability leads to rigidity while hyper-flexibility causes chaos and inefficiency. Leaning too heavily on stability adversely affect learning capabilities and causes stagnation (Isenring, 2024). We see VEE leadership over-relying on the continued three-months funding renewal, such that the end of funding came as a shock to some program leaders and beneficiaries and affected how the program was ramped down. Balancing flexibility and stability alongside awareness and reflection ensures that organizations adapt to situations without becoming complacent. This can be done through the use of structured sensemaking and feedback loops (Laser, 2021) which allows organizations to maintain situational awareness and address emergent issues as they occur, especially in complex and chaotic situations. VEE leadership was very aware of their situation (providing meals to Vermonters during crisis, amidst all administrative hurdles associated with it), and they effectively balanced flexibility and stability alongside awareness and reflection while responding to the situation. Snowden and Boone (2007) recommend regular cycles of probe-sense-response and open communication.

According to the Cynefin framework, complex and chaotic situations encourage experimentation and adaptive learning (Snowden & Boone, 2007). Some organizations and communities also engage in information gathering to seek out more data to better understand the situation and reduce the levels of uncertainty (Grupe & Nitschke, 2013; Perrykkad et al., 2021; Vives & FeldmanHall, 2018; Wang et al., 2024). From VEE, we see program administrator creating VEE as an innovative emergency program where beneficiaries are dignified through their self-proclamation of need, and community experts engaged to suit the program to the specific food needs of each county, among

others. VEE program administrators engaged in rigorous program data collection at every stage of the program, from meals distributed to businesses and farmers engaged, and shared this information in their various reports (VEE Intermediate Report, VEE Economic Analysis, Participant Survey Report, Restaurant Reports) for future use and reference by others. VEE administrators engaged in various information seeking habits including the institution of a Taskforce that met regular to discuss the operations of the program, and ways to better the program with the expert knowledge they had from their fields of work. The fourteen (14) hubs also met regular to discuss the program during its implementation.

The information seeking behavior was also very instrumental in the continuous funding of the program as it served as evidence of the effects of the program on Vermont communities. On the other hand, too much uncertainty without measures to tackle it could lead to stress, anxiety, and an inability to make decisions due to the fear of making the wrong decision. We see VEE leadership stressed with the uncertainties that surrounded funding for the program, experiencing great anxiety when the three months window was about expiring. They were unable to plan to the very long-term as funding was not directly assured for the next three month. Moreso, a lot of efforts had to go into numerous short-term planning than they would have spent if they were able to plan for loner terms. Vermonters adapted and adjusted to the COVID-19 through the implementation of VEE as their coping style and solution for navigating the pandemic, creating a VEE that has become a model emergency program today and building resilience in their communities. This is consistent with Miller and Engemann (2019)

where resilience could be enhanced under uncertainty when proactive problem-solving is encouraged through positive coping styles, and Snowden and Boone (2007) where resilience is fostered in uncertain and complex situations through experiments, collective learning, and adaptive strategies.

VEE exemplifies the concept of nonlinearity in the Cynefin Framework and complex systems where outcomes are not proportional to inputs, and emergent behaviors and large systemic effects can result from even very small changes (Kurtz & Snowden, 2003; Preiser, 2019; Snowden & Boone, 2007). VEE's targeted shifts in the policy around emergency food systems resulted in huge shift in design and delivery of food aid. Dignity stands strong as one outcome that contributed largely to the state-wide participation of the majority of Vermonters during a time of crisis. We see a prioritization of systemic and policy change over individual interventions, which resulted in a large multiplier effect of \$78 million public funds, \$10.1 million in private investment by restaurants, farms, and food producers, retainment of over 400 full-time employees, the establishment of new partnerships between farmers and restaurants, enhanced community cohesion and great contribution to keeping the economy of Vermont alive during the COVID-19 pandemic (VEE Economic Analysis, 2023). The support for local food production using local restaurants and food organizations who had to source their ingredients from local farmers contributed hugely to food security and resilience across Vermont during the crises. The Taskforce and Hub organizations inculcated into the VEE program ensured representation and feedback from multiple organizations which translated into emergent ideas and solutions for the chaotic hunger issues that became

extreme during the pandemic. The local focus of the program also reinforces the Cynefin principle that complex situations require adaptive, context-specific strategies in place of linear, one-size-fits all solutions (Kurtz & Snowden, 2003; Preiser, 2019; Snowden & Boone, 2007). The magnitude and direction of the effects of small changes however would depend on the local conditions surrounding the change.

On the other hand, while the program faced significant uncertainties, the initial availability of federal disaster response funding provided certainty that enabled the rapid launch of VEE to address food insecurity in Vermont during the crisis. Moreso, the certainty that federal disaster response funding will be released, and the guidelines provided by the federal disaster response authority for its funding presented some form of certainty to the leaders of the VEE program. Leaders could plan, coordinate, and direct the distribution of resources, and the implantation of the program itself (the distribution of meals). Certainties associated with federal disaster response authority funding allowed SEVCA and other stakeholders to confidently plan and mobilize resources for the emergency food program, fostering resilience through expanded networks, capacity-building, and long-term preparedness efforts. This produced a cascading effect, amplifying the positive impacts of the monetary aid by enabling coordinated responses, strengthening economic stability, and bolstering public trust. The findings are also consistent with Highfield et al. (2013)'s result from Hurricane Ike where he found that while the federal disaster response authority's guidance provided a framework for action, it also presented various uncertainties linked to funding timelines and eligibility criteria, which affects local recovery planning, that policymakers must navigate. The findings are

also consistent with Shafizadeh (2024) where organizations use strategic adaptation, operational responses and organizational learning to respond to uncertainty. VEE leadership is seen to adapt VEE to suit the needs of beneficiaries in a time of crises. They provided community avenues for beneficiaries to engage with other individuals in a time where people stay alone in their homes. VEE strategically adapted and got used to the three (3) months funding cycle, ready for renewal at each open funding cycle. VEE conducted its operations with the statewide program decentralized to all fourteen (14) counties in the state, having hub directors in charge of recruiting and overseeing meal distributions, and SEVCA being the overall administrator and grantee of the program.

5.3. Practical Implications

This research will be valuable to policymakers, emergency management professionals, and food systems stakeholders. It offers insight into how innovative programs like VEE can give off benefits that transcend beyond the direct measurable goals of the program. It also provided insight into how innovative programs can effectively respond to complex crises by embracing, navigating and responding to varying degrees of uncertainty and adapting to changing conditions. This study contributes to how emergency feeding programs like VEE can be leveraged effectively in addressing food insecurity around the world as it offers a replicable framework for future emergency feeding programs through its focus on design, partnership and community-centeredness. The analysis of the perceived indirect impact of the VEE program reveals the limitations of relying solely on economic models to evaluate the impact of crisis relief funding. Evaluation frameworks should be developed to capture the multidimensional

impacts of relief funding, including measures of social cohesion, community resilience, and long-term preparedness. Decision-makers can make more informed choices and allocate resources in a manner that maximizes the overall resilience and well-being of communities by recognizing and valuing these intangible benefits,

Policymakers and decision-makers should recognize that such programs have the potential to generate resilience and societal benefits like improving service delivery of food aid programs, building and empowering communities, and breaking silos and forming partnerships for growth, that far extends beyond their immediate financial impacts. To fully harness the multiplier effect of economic programs, funding structures and policies should incorporate mechanisms for fostering community engagement, collaboration, and capacity-building in their target jurisdictions and even beyond. As such, policy makers should model these economic impact programs to integrate participatory approaches that encourage developing and feeding on local networks, and foster resilience building alongside the financial assistance itself. Policy makers through this study will gain insight regarding how funding can affect the design, implementation and effectiveness of programs, especially emergency feeding programs. This will help them to effect laws and policies that will ensure smooth run of emergency feeding problems, especially during a time of crises. This study will support the development of frameworks that are robust enough to support and ensure the continuity and resilience of emergency feeding programs especially in times of heightened need. Inculcating the findings and valuable insights to the field of community feeding programs, food security

initiatives, and local food systems will enhance the impact and sustainability of similar programs aimed at addressing food insecurity and supporting local economies.

Emergency program management administrators and personnels, as well as food assistance programs, should model and implement programs to be inclusive enough to normalize food assistance, promote dignity and reduce the stigma associated with receiving aid or assistance. These programs in their implementation should incubate local leadership through the involvement and representation of people from a wide community of practice to foster cross-sector collaborations. It should aim to foster collaborations between governments, non-profits, for-profits, in multi- sectors. Administrators of food assistance programs can use the results of this study to better understand how they can navigate between the certainties and uncertainties associated with their source of funding in the design and implementation of such programs, to be better placed in their efforts to provide for the food needs of their beneficiaries. It will offer valuable lessons for improving the design, implementation, and management of emergency response programs, particularly those that aim to simultaneously address multiple systemic challenges.

Communities, clients, for profit businesses, nonprofits and other entities hoping to participate in such programs in the future would have a clear idea of some of the positives and negatives that may affect the emergency feeding program, and consequently, their object of business if they participate in such programs. A proportion of the certainties and uncertainties surrounding the program will ripple down to these entities depending on how it is managed by those program administrators directly involved with the program.

Again, through the study, food program beneficiaries are seen as contributing to the local economy and empowering their communities when they patronize such program rather than being seen as only relying on the benevolence of the community and such programs, which is a huge shift from the stigma associated with food aid programs.

5.4. Limitations

Even though this study provides insights into the perceived indirect impacts of VEE, and the certainties and uncertainties surrounding federal disaster response funding and how VEE leadership anticipated and navigated through them for the successful roll out of the program, it has some limitations. It uses qualitative data of VEE alone to make its findings and contributions to the body of research on emergency food program management, which even though could be generalized to emergency food program management, may not be applicable to other emergency food programs. Findings of the study are inferred from the perspectives of VEE leadership and as such, may not be fully representative of the views of the general populace in Vermont. Leadership views may be influenced by their roles in their various institutions as well as their advocacy roles to speak for the program in a positive light and as such may downplay the programs shortcomings in their recall of the program as the program has gained a celebrated status in Vermont and beyond. Again, interview responses are the perspective of the 32 leaders who accepted to be interviewed, and hence, even though at a huge number of 42 interviews, may be skewed to their views only, rather than the views of the entire population of people who were in charge of managing the affairs of VEE while it was in

session. Moreso, these program administrators were not necessarily beneficiaries of the program, which may skew their views about the program.

Even though some of the rounds of interviews was done during the time VEE was in succession, the last round was done at a time where the program was long over and may cause recall bias in these stakeholder reflections of the program. Additionally, due to availability, some participants participated in only one round of interview, while others participated in more than one round of interviews. Moreso, the experiences and contexts of Vermont, especially in their demographi9c and policy landscape, may not necessarily be generalized for other states in the United States of America, and the rest of the world, as each state varies culturally, administratively, and in numbers. It is found that the culture and community spirit of Vermont allowed it to enroll and implement such a statewide program. While the study provides a rich qualitative analysis of these perceived indirect impacts of the program, it is not backed by quantitative study that measures the magnitude of these impacts or compares it with other jurisdictions.

Another key limitation is researcher bias. With qualitative research drawing more on the researcher, it is highly impossible to be completely objective. The researcher accepts that their view might have shaped how the data was coded and interpreted, creating a potential for researcher bias, and challenges in generalizing findings to a broader population. I acknowledge that my positionality as a researcher with certain identities and perspectives may influence the interpretation of the interviews. In coding and interpreting the interviews for this research study, I recognize the significance of my positionality as a researcher in shaping the analysis process. I aimed to remain vigilant

against imposing preconceived notions or biases on the data and strived to let the participants' voices guide the analysis.

5.5. Future Research

Future research should try to measure the perceived impacts of Emergency Food Response programs in Vermont and in other jurisdictions as this study only tries to identify them and not measure them quantitatively. Future quantitative research should develop Likert scales to try to quantify the degrees of certainties and uncertainties surrounding emergency feeding programs, and their funding sources and mechanisms. Through the use of Likert scales and other quantitative tools, future studies should aim to quantify not only the indirect economic impacts and other impacts of VEE and other (emergency) food programs but also the long-term effects on community resilience, food system infrastructure, and social equity, and the cost-effectiveness of emergency feeding programs, which could serve to argue for the roll out of such programs during times of crises.

Even though it is challenging to quantify the perceived societal impacts of VEE, there is the need for a more holistic understanding of the multiplier effect that results from funding and implementing such programs, an approach that goes beyond considering only the economic ripple effects of programs but also their potential to foster resilience, community empowerment and social cohesion. Quantitative measures of social capital and trust among VEE partner organizations are also future areas of research that could be explored.

Future research could also explore including the experiences and perceptions of dignity, equity, and stigma of broader stakeholders including meal beneficiaries, farmers, restaurant owners, food program management, state and non-state officials among others, to better understand the difference in their experiences. Additionally, one could conduct a longitudinal study of the effects of VEE post-pandemic on the community resilience and food systems of Vermont. Again, across states and countries, comparative studies could be done to establish contextual factors that limit or amplify indirect impacts of such programs, and whether they are replicable in other jurisdictions. Research can be commissioned to study how state policies, especially in relation to food programming, have changed, or not, following the successes of VEE.

Future research should include both qualitative and quantitative data to be able to determine how planning and implementation of the programs was affected by the uncertainties and certainties as this current research is qualitative only. Again, research could be done to investigate the administrative challenges that are faced in emergency feeding program management by administrators. Lastly, research could be engaged to develop and validate metrics that measure the performance of emergency feeding programs.

5.6. Conclusion

It is clear through this study that the Vermont Everyone Eats program initially designed to provide meals for Vermonters during a time of global health and economic crisis caused by the COVID-19 pandemic had several impacts that extends beyond mere provision of meals to Vermonters in need during a time of world health and economic

crisis. It extended far beyond addressing food insecurity during the COVID-19 pandemic. Even though VEE faced some challenges, including uncertainties surrounding its funding, program administrators embraced and navigated the complex interplay between certainty and uncertainty that surround the management of an emergency feeding program. VEE leadership navigated and responded to the initial certainties of funding and subsequent renewal uncertainties to roll out the program and continue implementing it effectively by planning and coordinating resources available to it. The necessity of three-month renewal cycles forced VEE administrators to operate with provisional strategies, balancing the need to scale services with the looming threat of abrupt program termination. Implementation and design decisions, though strategically crafted to meet funding's expectations, were continually complicated by funding instability that impacted communication, planning, and the ability to build sustainable partnerships.

Despite these challenges, Vermont Everyone Eats demonstrated remarkable adaptability and resilience. The program's ability to leverage initial certainties, embed rigorous data collection into operations, and foster trust among partners and communities enabled it to deliver critical services during a time of great need. The program generated community and economic resilience for Vermont through its collaborative and innovative model of integrating food security with economic development and community wellbeing. It reshaped Vermont by improving service delivery of food aid programs, fostering partnerships and relationships across multiple sectors, and building and empowering communities in Vermont. These impacts even though powerful, are indirect impacts because they were not the direct goals or benefits of the program. The perceived

impacts of VEE even though unintended, are powerful outcomes that shaped food assistance policy and implementation in Vermont and will continue to do so in the future ahead. It shows how crisis response programs could become modes of transformation in communities. The case of VEE illustrates that while communities can and do rise to meet uncertainty with innovation and determination, more consistent structures of support are necessary to truly maximize the impact of emergency relief efforts. VEE will serve as a blueprint for future emergency response during disasters in the future.

TABLES AND FIGURES

Table 1:

List of Interview Participants

| | Region | Organizational Affiliation | Sector Affiliation | VEE participation | Round 1 | Round 2 | Round 3 |
|---------|--|---------------------------------------|-------------------------------|------------------------------|--------------------|--------------------|--------------------|
| Nic | Chittenden, Franklin, and Grand Isle Counties | Business | Food | Hub | | I | |
| Remi | Hardwick | Nonprofit | Agriculture | Hub | | I | |
| Karen | Brattleboro & Beyond | Business | Community Development | Taskforce Hub | I | I | |
| Arlene | Central VT | Academic | Agriculture | Hub | | I | |
| Justin | Chittenden, Franklin, and Grand Isle Counties | Business | Food | Hub | | I | |
| Emily | Chittenden, Franklin, and Grand Isle Counties | Nonprofit | Agriculture | Hub | | I | |
| Naomi | Rutland | Nonprofit | Agriculture | Hub | | I | |
| Natalie | Rutland | Nonprofit | Agriculture | Hub | | I | |
| Joanne | Northeast Kingdom | Nonprofit | Food Security | Hub | | I | |
| Zeynep | Middlebury | Other | Food Security | Hub | | I | I |
| Vera | Bennington County EE | Nonprofit Business | Public Health | Hub | | I | I |
| Peggy | Brattleboro & Beyond | Nonprofit | Community Development | Hub | | I | I |
| Nadine | Upper Valley | Nonprofit | Agriculture | Hub | | I | |
| Lena | Brattleboro & Beyond | Nonprofit | Economic Development | Hub | | I | |
| Collin | Vergennes | Business Nonprofit | Food | Hub | | I | |
| Toni | Middlebury | Nonprofit | Public Health | Hub | | I | |
| Bjork | Chittenden, Franklin, and Grand Isle Counties | Nonprofit | Food Security | Taskforce Hub | I | I | |

| Central VT | | | | | | |
|------------|---|------------------|-------------------------------|---------------|---|-----|
| Miela | Northeast Kingdom | nonprofit | Agriculture Hub | | | I |
| Ziggy | Battleboro | nonprofit | Economic Development Hub | Taskforce | I | I |
| Roxanne | Londonderry | nonprofit | Social Services Food Security | Hub | | I |
| Ben | State | nonprofit | Food Security | Taskforce | | I |
| Grace | State | nonprofit | Food Security | Taskforce Hub | I | I |
| Courtney | Washington, Lamoille and Orange | nonprofit | Economic Development Hub | Taskforce | I | I |
| Bella | Chittenden, Franklin, and Grand Isle Counties | Nonprofit | Agriculture & Food security | Hub | | I I |
| Lila | Chittenden | Nonprofit | Food Security | Hub | | I |
| Neil Young | Vermont | State Government | Emergency Services | Taskforce | I | |
| Buffy | Vermont | State Government | Human Services | Taskforce | I | |
| Grace | | Nonprofit | | Taskforce | I | |
| Tom | Vermont | State Government | Agriculture | Taskforce | I | |
| Dolly | Central VT | Nonprofit | Food Businesses | Taskforce | I | |
| Beck | Vermont | State Government | Economic Development | Taskforce | I | |
| Cher | Vermont | Nonprofit | Food Systems | Taskforce | I | |
| Joni | Vermont | State Government | Agriculture | Taskforce | I | |

Table 2:

Summary of Themes

| Themes | Sub-themes |
|--|--|
| Improving Service Delivery of Food Aid Programs | The program structure fostered kindness and compassion. VEE promoted equity and inclusion VEE promoted dignity. |
| Community Building and Empowerment | VEE built community by fostering cross-sector involvement. VEE fostered community empowerment VEE fostered community networks |
| Breaking Silos and Formed Unlikely Partnerships | Breaking Silos and forming unlikely partnerships. Innovative problem identification and programming Build social capital and trust |

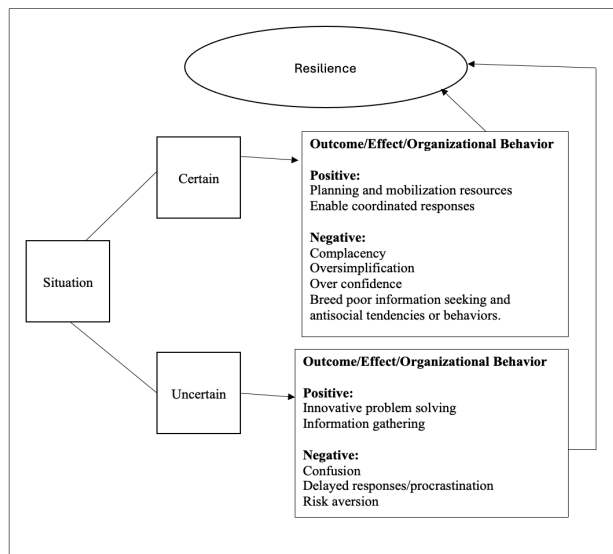


Figure 1: *Conceptual model of the Relationship between Certainties, Uncertainties and Resilience*

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APPENDIX

Reflection Statement

As I bring this thesis to a conclusion, I constantly reflect on the personal and professional development that I have experienced through this thesis period, and my entire master's study in The University of Vermont's Community Development and Applied Economics. I can boldly say that I have not developed just as a scholar, but in all spheres of my life.

I particularly enjoyed and benefitted hugely from the weekly check-ins with my advisor, Dr. Sarah Noel Heiss who met with me and my research teammate, Robert Patane to coach us both individually and jointly. These check-ins were the transformative part of my research journey, a guidance that extended even beyond my academic journey. Sarah generously met with us even through the summer periods, for which I am so grateful for. Through the data analysis process, I greatly benefited from discussing codes they were being generated. Through her guidance, I developed sharper research questions, and clearer writing. Amidst the mentorship, I was given space to grow, navigate and develop my own perspectives. I hope to carry the thoughtfulness and dedication she exhibits into my future professional work.

Through my study, I got to learn and become fluent in research methods, especially qualitative research methods, and in using qualitative research tools and techniques like NVivo 14 and hierarchical coding. Moreso, I got to learn and use new software that I was not privy to or familiar with its use prior to coming to the university of Vermont. Some of them included R, Bayesian Lab, SPSS Statistics, AnyLogic and NVivo.

Equally, I am grateful and appreciative of my thesis committee (Dr. Trishnee Bhurosy, Dr. David Conner and Dr. Sarah Noel Heiss) for jointly contributing to guiding and mentoring me through my thesis journey, especially towards completing this thesis. Through your feedback, belief and encouragement, I got to dig deeper, navigate the complexities of academic research, and refine my voice through my writing.

The relationships and connections I have nurtured with my professors, colleagues and staff of the CDAE Department are going to stick with me forever, not forgetting the many memories I made on UVM campus as a Cat.

I would conclude by saying that the journey had not been easy, with moments of doubts setting in, but with the support of my Advisor, Thesis Committee, family, friends and colleagues, I have been able to achieve my program goals. I value the spirit of perseverance and collaboration that I cultivated during this period. From the findings of the study, I gather that even little changes to inputs can yield great increases in outcomes, which I am going to apply to my personal life going forward. Not only do I leave this program with a thesis containing two (2) publishable articles, but I am also amplified to contribute meaningfully to my society.