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Assessing the Current State of Food Insecurity in New Zealand

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Assessing the Current State of Food Insecurity in New Zealand



Assessing the Current State of Food Insecurity in New Zealand



An Interactive Qualifying Project
submitted to the Faculty of
WORCESTER POLYTECHNIC INSTITUTE
in partial fulfilment of the requirements for the
degree of Bachelor of Science

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Jason Conklin
Benjamin Huang
Paige O’Gorman

6 March 2020
Report Submitted to:

This report represents the work of WPI undergraduate students submitted to the faculty as evidence of completion of a degree requirement. WPI routinely publishes these reports on its website without editorial or peer review. For more information about the projects program at WPI, please see <http://www.wpi.edu/academics/ugradstudies/project-learning.html>

Professor Michael Elmes
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Abstract

Food insecurity is defined as the lack of access to an adequate quality and quantity of nutritious food. Food insecurity is a “nested issue” under the umbrella of poverty, and stems from inadequate incomes and high living costs. Approximately 14.0% of the New Zealand population is food insecure and needs assistance. In this project, we found a lack of coordinated government policies and discovered a network of non-governmental organizations committed to responding to the growing issue of food insecurity.



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- Murray Edridge, Wellington City Missioner, Wellington City Mission
- Ray Tuffin, Community Development Manager, Wellington City Mission
- Tric Malcolm, Executive Director, Kore Hiakai
- Matthew Dagger, General Manager, Kaibosh Food Rescue
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Meet the Team



My name is Paige O’Gorman, and I am from Swampscott, Massachusetts. I am a Biomedical Engineering student at WPI. I am so appreciative that I had the opportunity to complete my IQP project in Wellington, New Zealand. I have met so many new people that have been so generous in helping our team. I will never forget this experience.

My name is Derek Comeau and I am a Mechanical Engineering student from Paxton, Massachusetts. I am grateful to have had the opportunity to complete my IQP in Wellington. My team and I met so many nice people during this project and I am happy to have been able to do volunteer work with the Wellington community.



My name is Benjamin Huang. I am an Electrical and Computer Engineering student from Westborough, Massachusetts. I feel so honored to have worked on this project. I am so appreciative of this amazing opportunity and to have met so many great people over the span of this unforgettable experience.

My name is Jason Conklin. I am a Robotics Engineering student from North Carolina. I appreciated the opportunity to travel to a foreign country and observe the food distribution system. My perspective of poverty and food insecurity was changed when I met the real people it affects. I hope this project brings awareness to this important issue.





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Executive Summary

The goal of this project was to assess the current state of food insecurity in New Zealand. Due to New Zealand's reputation as a well-developed country with a strong agricultural system, most people assume that the country is not affected by food insecurity. In reality, food insecurity is a global issue that also impacts New Zealand. In 2018, the United Nations, Food and Agriculture Organization (FAO), and the World Health Organization (WHO) reported that 14.0% of the New Zealand population is food insecure (FAO et al., 2019). The issue of food insecurity, though, is not spread evenly across the population. According to the 2015/16 New Zealand Health Survey, the prevalence of food insecurity is much higher in the Māori and Pacific populations (Ministry of Health, 2019). The survey found that 37.1% of the Pacific population and 28.6% of the Māori populations are food insecure, while only 15.4% of people from European descent report being food insecure. Additionally, the issue is especially prevalent among the children, with approximately 20% considered food insecure. Approximately 43% of households with incomes lower than \$50,000 NZD (\$32,000 USD) are food insecure, compared to only 8.3% of households with a gross income of more than \$50,000 NZD. Approximately 38% of single parent households are food insecure, while only 12.7% of two-parent households are affected (Ministry of Health, 2019).

Research suggests that food insecurity in New Zealand is part of a series of nested problems relating to poverty, which include low income, rise of housing costs, and obesity. Rising cost of housing has accelerated the rate of food insecurity in New Zealand in that many people are left with little money for food after having to pay for housing. Many food relief organization leaders in the Wellington area identify high housing costs as the primary cause of income-related food insecurity. The national government acknowledges that New Zealand has a problem of food insecurity, but there currently are no coordinated policies or programs to address the issue. Additionally, the many food relief organizations in the country also lack strong

coordination. Inefficiencies and lack of coordination hinder the progress needed to address food insecurity in New Zealand.

The goal of this project was to assess the current state of food insecurity in New Zealand in order to inform future IQP projects and research. We achieved our goal by completing the following three objectives:

- 1) Assess the national and local government's role in addressing the issue of food insecurity
- 2) Identify non-governmental and other organizations that address hunger and food security in Wellington
- 3) Determine relationships between policymakers and food relief providers

To accomplish the first objective, we consulted archival documents and conducted semi-structured interviews with government officials across four different ministries: The Ministry of Social Development (MSD), Ministry of Health (MoH), Ministry of Education, and Ministry for the Environment. These interviews provided perspective on national policies and programs that address food insecurity. From the MSD, we learned about the benefits system and that there are no specific grants for food relief. However, various hardship grants such as the Special Needs Grant, Recoverable Assistance Payment, Emergency Benefit, and the Advance Payment of Benefit can all be used towards food. Special Needs Grants are the main grants used for emergency food relief and have increased dramatically in recent years. From December 2014 to December 2019, the number of Special Needs Grants used for food more than tripled, from 92,167 to 307,291 grants per year, at a cost of \$30.3 million NZD (\$19.05 million USD) in 2019 (Ministry of Social Development, 2019-a). In 2005, the MoH implemented the Fruit in Schools and Healthy Families New Zealand programs to promote healthy lifestyles to children and families. That ministry also runs the annual New Zealand Health Survey that collects nationwide nutrition data.

In early 2020, the Ministry of Education implemented the Free and Healthy Lunch in Schools program, which will offer free, nutritious lunches to children. As of the first quarter 2020, the program was in a trial phase, with plans to implement it across New Zealand if successful. The Ministry for the Environment focuses on food waste and supports waste minimization initiatives with the Waste Minimization Fund, which funds many food redistributors such as Kaibosh and Kiwi Community Assistance. These federal agencies are all governed by a central entity, the Department of the Prime Minister and Cabinet (DPMC), that coordinates different ministries' efforts and advises them on the policy priorities of the current government.

We achieved our second objective through semi-structured interviews and participant observations. We interviewed managers at numerous non-profit and non-governmental food relief organizations in Wellington to understand how they address food insecurity. We categorized these NGOs as either food distributors or direct service providers. Food distributors collect food that groceries, restaurants, and cafes would have thrown away and redistributes it to direct service providers. Direct service food providers take this food and provide it to food insecure individuals. Furthermore, we volunteered at The Free Store, Kaibosh Food Rescue, and Kiwi Community Assistance (KCA) to study their operations and to gain an understanding on how they contribute to New Zealand food relief efforts. Volunteering also provided us with an opportunity to gather personal accounts of volunteers' perspectives on food insecurity.

We completed the third objective by analyzing data about the government and NGO programs. We created a network map of how the government and NGOs coordinate to help provide aid to individuals faced with food insecurity. Based on our findings and analysis, we recommend areas for further in-

vestigation and for future food insecurity related Interactive Qualifying Projects (IQPs) in New Zealand. We provide suggestions on themes related to food insecurity that would benefit from further research, and we provide potential project summaries and information on interested organizations and potential partners.

- Nutrition

The Regional Public Health organization focuses on nutrition across New Zealand. They run many health initiatives, such as the Wellington Region Fruit & Vege Co-op where anyone can purchase healthy fruits and vegetables in bulk quantities for reduced pricing. A potential project with this organization might focus on promoting healthy diets or researching the effects of poor nutrition on obesity, diabetes, or malnutrition. Another project could investigate the prevalence of these health deficiencies across different demographics such as ethnicity, gender, and age.

- Child Poverty

The Office of the Children's Commissioner (OCC) is an independent crown entity, which means it is government-funded yet independent from policy decisions. The OCC does research on children's issues including poverty and nutrition. A project with the OCC might be to assist in data collection or to aid an existing food program such as the Free and Healthy Lunch in Schools program.

- NGO Coordination

Kore Hiakai is a relatively new organization formed in 2018 that seeks to unify NGO food relief efforts in New Zealand. Kore Hiakai is an organization of organizations. It consists of six core members that manages and aids coordination between 75 interested organizations. As Kore Hiakai is new, a project with them could help them expand their outreach and find more efficient ways for NGOs to connect with Kore Hiakai.

Community Networks Wellington (CNW) helps promote communication between organizations in the Greater Wellington region by hosting a monthly collaboration meeting for NGOs. A project with CNW could develop an online system for NGOs collaboration. This would help create a stream of coordination and collaboration.

- Food Distribution

The Kiwi Community Assistance (KCA) food distributor is located next to many supermarket distribution centers, making it easy to collect food. However, this location is outside the heart of Wellington, making it hard for charities to pick up food from them. A future project with KCA might be to find easier ways to distribute food to food relief organizations.

Food distributor Kaibosh prioritizes preserving the environment and minimizing food waste. Keeping the environment in mind, a project with Kaibosh might work to map out the most efficient routes and logistical pickup dates to retrieve food from various grocery stores to minimize driving time.

- Individual Perspective on Food Insecurity

Wellington City Council (WCC) is the local Wellington government. WCC is interested in creating local food access programs and is interested in investigating individuals' perspective on food insecurity. A project with WCC could assist them in researching food insecurity at an individual level to inform program design.

We provided contact information for these organizations to Professor Elmes, Professor of Organization Studies, our project sponsor, and Co-Director of the New Zealand Project Center.



Introduction

The goal of this project was to assess the current state of food insecurity in New Zealand. Due to New Zealand's reputation as a well-developed country with a strong agricultural system, most people assume that the country is not affected by food insecurity. In reality, food insecurity is a global issue that also impacts New Zealand. Food poverty, food insecurity, food security, and food access are all common terms used to describe the condition of lacking an adequate supply of food. Though various international organizations define the term differently, most professionals and practitioners in this sector agree that food insecurity is generally defined as uncertainty or lack of access to a sufficient quantity, adequate quality, and/or culturally appropriate food (FAO et al., 2019; Anderson, 1990). According to *The State of Food Security and Nutrition in the World*, published by the United Nations Food and Agriculture Organization (FAO) and the World Health Organization (WHO), "about 2 billion people in the world experience moderate or severe food insecurity" (FAO et al., 2019, p. vii) on a regular basis. The majority of food insecure individuals live in low-income countries, affecting women more than men (FAO et al., 2019). The consequences of food insecurity are far-reaching, and include political instability, economic inequality, and lasting poverty (Weinfield et al., 2014).

Though an economically developed country, New Zealand struggles with food insecurity. New Zealand has numerous policies that provide benefits to its impoverished citizens, including the 2019 Wellbeing Budget, which allocated funding for mental health, child poverty reduction, Māori and Pasifika support, economic opportunity improvements, and transitions to a sustainable economy (Government of New Zealand, 2019). Despite this, the FAO and WHO reported New Zealand's food insecurity rate at 14.0% of the total population as of 2018, substantially higher than similarly developed European and North American countries, that have average food insecurity rates of 8.4% as of 2018 (FAO et al., 2019).

There are systemic problems with poverty, particularly with the interconnected issues of affordable housing, low income, and food access in New Zealand. For instance, the Ministry of Social Development does not distinguish between food insecurity and other types of poverty in their social benefits programs, which manifests as a lack of public funding for food-specific poverty relief (S. Cameron, Interview, February 4, 2020). New Zealanders emphasize environmental responsibility, including waste minimization and sustainability, making the rescue and redistribution of food waste a high-priority issue. Organizations such as Kaibosh, KCA, the Free Store, and Love Food Hate Waste are involved in redistributing food that would otherwise go to waste; however, there is no food waste-specific government policy, like in France and Italy, which have laws that forbid grocery stores from throwing away edible food (González-Vaqué, 2017).

Given the many different stakeholders involved in food insecurity, poverty relief, and waste minimization issues, we sought to understand various stakeholder's approach to addressing food insecurity issues and how these organizations and entities interact with each other.

The goal of this project, therefore, was to assess the current state of food insecurity in New Zealand. This goal consists of the following objectives:

- Assess the national and local government's role in addressing the issue of food insecurity
- Identify non-governmental and other organizations that address hunger and food security in Wellington
- Determine relationships between policymakers and food relief providers

By investigating policies, relief programs, and the existing connections, or lack of connections, between different stakeholder groups, we aimed to provide a clearer picture of food insecurity in New Zealand.

*Fiona
Kaibosh Volunteer*

“Government investment in health, education and housing would allow for people to get out of the ‘poverty trap.’”

Fiona has volunteered at Kaibosh Food Rescue for three years, after waiting on the wait-list for a while. Her main reason for volunteering stems from environmental and social justice concerns. She sees food poverty as “a growing issue given the cost of living increases. I don’t remember seeing more than a few homeless people in Wellington, when I was at university, but now there are many in town and the suburbs. There’s lots of evidence of people working and still not making ends meet, which is appalling. The feeling that [New Zealand] is egalitarian and a good place for families has eroded.”





Literature Review

In this chapter, we define important terms relating to food insecurity, provide background on food insecurity in New Zealand, identify trends and observations concerning food insecurity, and present information on government agencies and policies that address food insecurity. We also identify relevant stakeholders and analyze literature that defines and provides measurement tools for food insecurity.

In this Section:

Understanding the Context of Food Insecurity in New Zealand

Defining Food Access

Food Relief Organizations

Discourse of Food Insecurity

Measuring Food Insecurity in New Zealand

Food Insecurity in the Context of Nested Problems

Household Composition

Ethnic Disparities

Debt

Housing

Food Insecurity and New Zealand Ministries

Ministry of Social Development

Ministry for the Environment

Ministry of Health

Ministry of Education

Department of the Prime Minister and Cabinet

Wellington City Council

Current Political Party in Power

Summary

Understanding the Context of Food Insecurity in New Zealand

Defining Food Access

Food Access, which refers to a person’s ability to acquire food, is composed of three categories: physical access, financial access, and educational access (Table 1). **Physical access** is the ability to physically obtain food and keep an adequate quantity and quality of food. Obstacles to physical access include distance, terrain, weather, means of transportation, ability to refrigerate, lack of cooking utensils, and living in a food desert (E. Haymes, Interview, February 12, 2020). **Food deserts** are areas that have a shortage of quality food sources. These can occur in and around certain neighborhoods in urban areas and commonly in rural areas. Food deserts are characterized by the lack of supermarkets, grocery stores, and other sources of healthy food, and often contain only fast food restaurants or convenience stores as sources of food (E. Haymes, Interview, February 12, 2020). **Food hubs**, in contrast, are areas or locations that contain an abundance of quality food. Examples include farmers’ markets and supermarkets. **Financial access** is defined as the ability to afford enough quality food, pay for transportation, and pay for means of cooking and storage. Financial barriers include low income, high living costs (mainly rent), debt, vehicle repairs, and household dependents. **Educational access** is defined as having the necessary knowledge about where to acquire and how to prepare healthy food in adequate quantities. Educational barriers include lack of food nutrition education and lack of food preparation knowledge.

Table 1: Three forms of “access” that affect food insecurity (S. Stevenson, 2013; E. Haymes, Interview, February 12, 2020)

Physical Access:

Definition:

An individual’s ability to physically acquire quality food

Examples:

long distances, difficult terrain, lack of transportation, lack of refrigeration, lack of proper cooking equipment, and physical disability

Financial Access:

Definition:

An individual’s ability to afford quality food or to afford transportation to acquire food

Examples:

low income, high cost of rent or housing, unexpected expenses, and unemployment

Educational Access:

Definition:

An individual’s knowledge about nutrition, the ability to prepare and preserve food, and knowledge of where to acquire food

Examples:

lack of nutrition education in school, family traditions around food, advertisements, and cultural attitudes towards food

Food Relief Organizations

There are at approximately 130 local direct food service providers in the greater Wellington area (Kaibosh, 2020; Kiwi Community Assistance, 2020). Six organizations that address food insecurity at the local level include Kaibosh, the Free Store, Kiwi Community Assistance (KCA), the Wellington City Mission, and the Salvation Army (These are described in detail on p.40). Organizations are often interdependent, such as Kaibosh and KCA, which perform collection and redistribution of wasted food. The majority of the food relief organizations, including the Wellington City Mission and Salvation Army, provide food relief as only one of many services, such as housing assistance and financial planning advice (P. Waugh, Interview, January 23, 2020; M. Edridge, Interview, January 23, 2020). As a global charity, the Salvation Army operates throughout New Zealand. Due to its large size and wide domain around poverty alleviation, the Salvation Army is often a leader in coordinating food relief efforts within individual communities. There also are small, neighborhood organizations and programs that address food insecurity at the extremely local level, along with city-wide food relief organizations, such as Kaibosh, KCA, the Free Store, and the Wellington City Mission. Neighborhood-level organizations include farmer's markets, community centers, and fruit and vegetable co-ops. One example is the Fruit and Vege Market (Figure 1) run by the Victoria University of Wellington Students' Association (VUWSA) since 2015 that aims to "help students' money go further, as well as to provide affordable and accessible healthy food options." (VUWSA, n.d.) This small-



Figure 1: A Victoria University student carries fresh vegetables sold at the Fruit and Vege Market on campus (VUWSA, n.d.)

scale market only serves students on a particular part of the Victoria University of Wellington campus (VUWSA, n.d.). This demonstrates a diversity in both size and purpose of food relief organizations in the Wellington region and across New Zealand.

Discourse of Food Insecurity

The discourse surrounding poverty, including food insecurity, affects public perceptions of the issue. In New Zealand, major nongovernmental social service providers, including the Salvation Army and City Missions, use language that is supportive and reflects positively on people suffering from food insecurity (See p.40 for description of organizations). These organizations see the food insecure population as more than a nameless group of victims and work actively to create sustainable solutions with the eventual goal of independence from charity (Auckland City Mission et al, n.d.). John Summers in his Mass Communication Master's degree thesis for the University of Canterbury, notes that "keywords can carry connotations and assumptions that often go unexamined" (2006, p. 15). In New Zealand, much of the public discourse for food insecurity avoids keywords, such as "hunger" and "poor," opting instead for internationally recognized terms such as "food insecure," and "low-income" (Auckland City Mission et al, n.d.; FAO et al, 2019; H. Stevenson, 2012).

A willingness to seek help for food insecurity is directly affected by ethno-cultural attitudes surrounding dignity and respect. Some of the disparity in the rates of food insecurity between ethnic groups are due to different in cultural values. Careerforce's 2015 Pacific Values Learning guide states the following about interacting with Pacific people:

Observing the correct etiquette or 'way of doing things' is an important aspect of respect and maintaining dignity. This includes both the formal, solemn processes that Pacific people observe when meeting and interacting with others, as well as a sense of individual poise and pride. (p. 16)

This cultural etiquette influences the way Pacific people interact with food relief providers and the benefits system. Accord-

ing to the Welfare Expert Advisory Group, current problems with the benefits system include an "often unwelcoming atmosphere," and a "focus on efficiency and reducing liability rather than on what is best for the individual or family" (Welfare Expert Advisory Group, 2019). This emphasis on efficiency and liability can alienate Pacific Islanders. Careerforce also states "Dignity, and respect for this, can play an important part in medical experiences. A person's concern for their dignity may, in some cases, outweigh concerns about their health," including decisions about receiving food aid from direct service providers (2015). In addition to cultural differences associated with receiving food support and benefits, "economic and work pressures can lead people to purchase and consume foods of lower nutritional quality than would be available from indigenous sources" (King et. al., 2019, p. 15). The ready availability of cheap, unhealthy food disproportionately affects people of Pacific Island descent who have fewer economic resources and who suffer higher rates of obesity and malnutrition.

For Māori people, a different cultural situation exists. King et. al. note that "the depletion of traditional sources of food such as puha and kaimoana has affected the ability of people to access a healthy traditional diet" (2019, p. 10). Māori populations have traditionally eaten a mix of nutritious foods, and until recently many had household vegetable gardens (King et. at., 2019). The Māori diet, though, has changed partly due to convenience and cost, echoing the experience of some Pacific peoples. King et. al. also note that family situations have a role in determining Māori dietary choices. In Māori households where both parents work, "working parents are more inclined to select food that has already been cooked. This often includes unhealthy options such as fast-food" (King et. at., 2019, p. 10).

Measuring Food Insecurity in New Zealand

New Zealand's system for measuring food insecurity is based on benchmarks and models from the United States (H. Stevenson, 2012; Parnell and Gray, 2014). In the early 1990s, the Food and Nutrition Service of the United States Department of Agriculture (USDA) led an effort to develop a "comprehensive benchmark measure of the severity and prevalence of food insecurity and hunger in the United States" (Carlson, Andrews, & Bickel, 1999), which resulted in the Household Food Security Module (HFSM). The HFSM includes a scale of five household food condition events and behaviors, which include; anxiety, quality and quantity of food eaten, coping strategies, and consequences of reduced food intake (Hamilton et al., 1997; Carlson et al., 1999). The HFSM index classifies households as having high, marginal, low, or very low food security.

Using an existing model based on the HFSM, along with indicators identified in focus groups, Jenny Reid, a food insecurity researcher with the University of Otago, created a conceptual model specifically for New Zealand to develop diagnostic questions for food security (H. Stevenson, 2012). Five common themes were identified for this model: food insecurity, food inadequacy, coping strategies, alternative sources, and cultural issues. Reid's model included "issues of hunger, anxiety of providing meals, the restriction of the amount and type of food purchased, and lack of access to food" (H. Stevenson, 2012). Eight indicator statements were developed to elicit responses related to the themes, which were then included in the 1997 New Zealand National Nutrition Survey (Parnell and Gray, 2014). A linear measurement scale was developed to rank food insecurity in three levels: Fully/almost food secure, moderate food security, and low food security (Parnell and Gray, 2014).



This model was used during the New Zealand Ministry of Health's 2008/09 Adult Nutrition Survey, that sampled 4721 participants. The survey "allow[ed] a unique opportunity to examine household food security status within New Zealand and its relationship to body weight status and nutrient intake on a nationally representative sample of New Zealanders" (H. Stevenson, 2012). Results showed that 59.1% of the New Zealand population was "fully/almost food secure," 33.7% were "moderately food secure," and 7.3% were "low food secure" (Figure 2) (Mackay et al., 2011).

Food Insecurity in the Context of Nested Problems

Research suggests that food insecurity in New Zealand is closely related to income, poor food choices, and obesity. Multiple scholars have linked low income with obesity and food insecurity, due to "abundant choices of relatively inexpensive calorie-dense foods that are convenient and taste good" (Rush et al., 2007). Hayley Stevenson (2012), in a master's thesis for the University of Otago, identified several key indicators for food insecurity, including marital status, age group, ethnicity, employment status, and income. Although food insecurity is not exclusive to low income households, "income is the strongest predictor for food insecurity" (H. Stevenson, 2012). Emmeline Haymes, a registered nutritionist and public health advisor with Region Public Health, a public health unit for the greater Wellington region, stated that some of the major obstacles to eating nutritious food are insufficient income, lack of time, poor cooking knowledge, and lack of space or equipment for food preparation. Of these, Haynes identified low income as the biggest obstacle (E. Haymes, Interview, February 12, 2020). The New Zealand Health Survey of 2015/16 is the most recent survey to investigate household income as a factor relating to

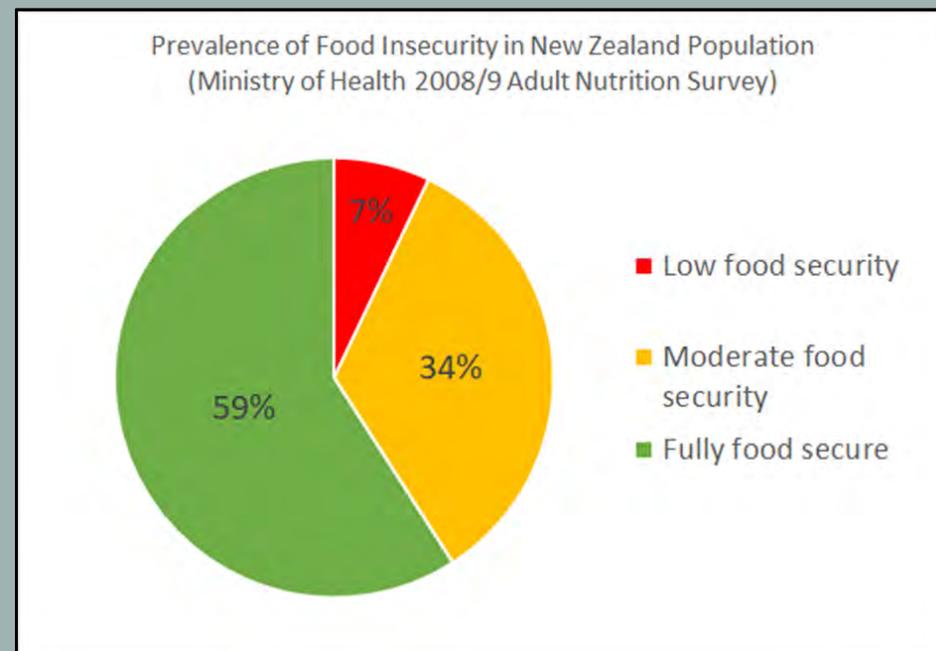


Figure 2: Prevalence of food insecurity in New Zealand population, as found by the 2008/9 Adult Nutrition Survey (Mackay et al., 2011)

childhood food insecurity. The results of the food insecurity portion of the survey (4,721 respondents) showed that in households with a gross household income of more than, or equal to, \$50,000 NZD (\$32,000 USD), only 8.3% of children were food insecure. For households with gross incomes of less than \$50,000 NZD, food insecurity was much more prevalent. Approximately 43% of respondents with lower incomes reported that their household was food insecure (Figure 3) (Ministry of Health, 2019). Those requiring financial assistance were found to have higher rates of food insecurity: approximately 56% of families on the benefit system are food insecure, while only 11.5% not on the benefit system are food insecure (Figure 4) (Ministry of Health, 2019).

Household Composition

The 2015/16 New Zealand Health Survey also investigated the relation between household composition and food insecurity. Food insecurity was more prevalent in larger families and households with a low socioeconomic position (Ministry of Health, 2019). Survey results showed that 37.7% of households with at least four children were food insecure (Figure 5). Additionally, sole parent households more frequently face food insecurity than two-parent households. The survey showed that 12.7% of two-parent households were food insecure, while 38% of sole parent households were food insecure (Figure 6). In addition to food insecurity's nested factors of ethnicity and obesity, child poverty is also an associated factor. The 2015 survey found that one in every five children in New Zealand lived in a food insecure household (Ministry of Health, 2019). These findings indicate that food insecurity is closely linked to related

health risks such as obesity, behavioral difficulties, and malnutrition.

In 2010, researchers in the Department of Public Health and Health Inequalities Research Program investigated demographic and socio-economic determinants of food insecurity in New Zealand and whether these factors vary between gender. Researchers defined someone as food insecure if “they had to use special food grants or food banks, been forced to buy cheaper food to pay for other things or had to go without fresh fruit and vegetables often,” over the last 12 months (Carter et al., 2010). Results showed that, in 2004/05, more than 15% of respondents were food insecure (Figure 7) (Carter et al., 2010). Food insecurity was also “found to be much higher in females (19%) compared to males (12%)” (Carter et al., 2010). Researchers stated that the higher rates of food insecurity among females is likely because females are more likely to report their food insecurity status than males, and women are more likely to be sole parents (Carter et al., 2010).

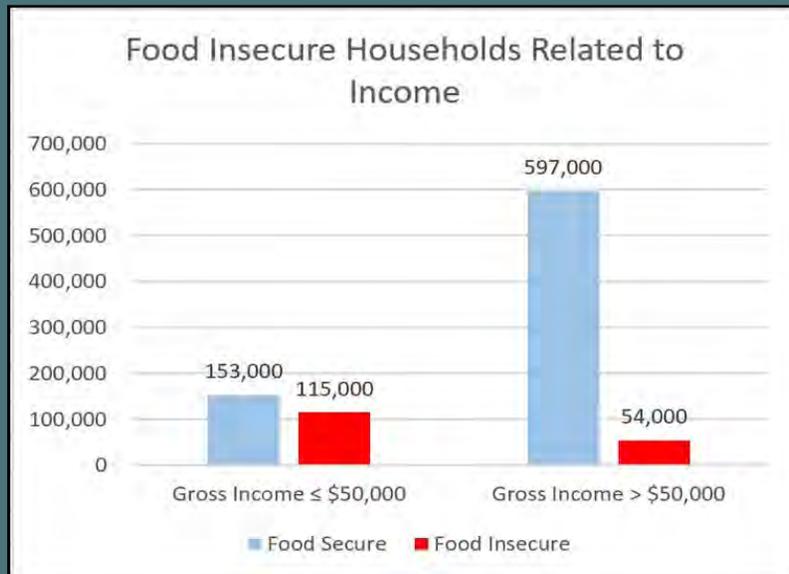


Figure 3: Food insecurity status compared to income of respondents (Ministry of Health, 2019).

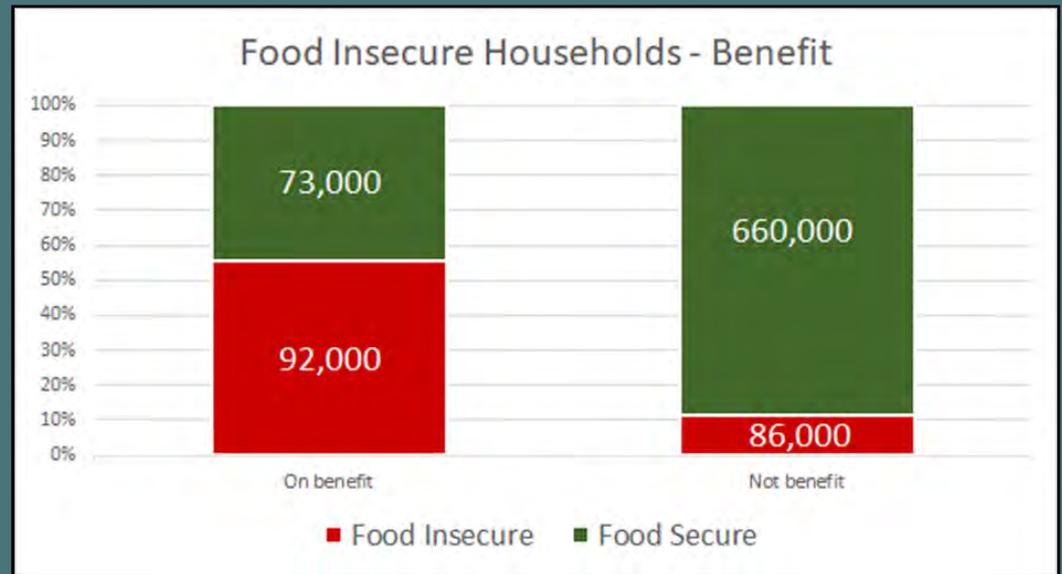


Figure 4: Food security status compared to benefit status of respondents (Ministry of Health, 2019).

Ethnic Disparities

A 2012 University of Otago Master of Science thesis on the topic of food security in New Zealand identified the relationship between food security, ethnicity, and body weight. The author, Hayley Stevenson, found a positive correlation between food choices, nutrient intake, and food security. She emphasized the consideration of food and nutrient intake when understanding the relationship between food insecurity and Body Mass Index (BMI) since “one of the first steps in food insecurity is to decrease the quality and variety of the diet consumed” (Radimer K, Olson C and Campbell C., 1990; Parnell, 2005). The 2018/19 Health Survey further explores the relationship between obesity and ethnicity. It found that obesity disproportionately affects the Māori and Pacific Peoples, such as Samoan, Cook Islands Māori, Tongan, and Niuean ethnic groups. Pacific Peoples have the highest prevalence of obesity (66.5%), followed by Māori (48.2%), European/Other, (29.1%), and Asian (13.8%) (Figure 8) (New Zealand Health Survey, 2019).

The Health Survey also examined the food security status of children, including the differences between ethnic groups. Findings showed that approximately 37% of children in the Pacific ethnic grouping are most frequently food insecure. Children within the Māori population are the next most affected ethnic demographic with 28.6% considered to be food insecure. The prevalence of food insecurity among children of European descent is 15.4%, while those of Asian descent is 8.5% (Figure 9).

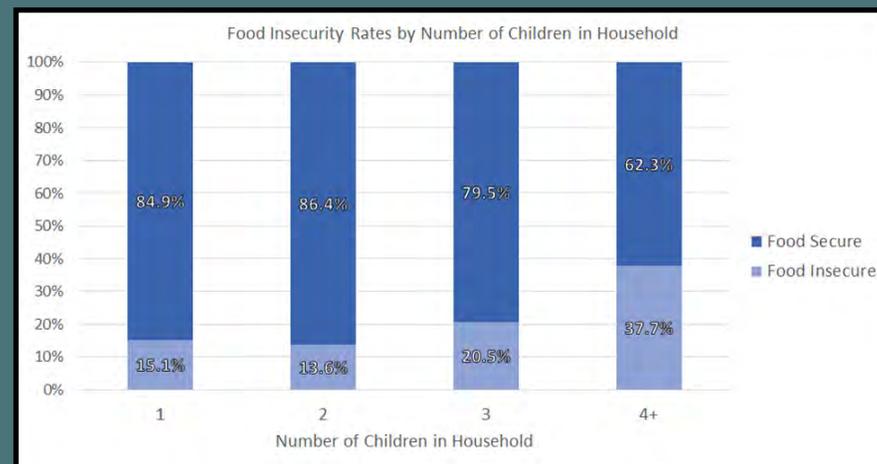


Figure 5: Food Insecure Households - Number of Children (Ministry of Health, 2019)

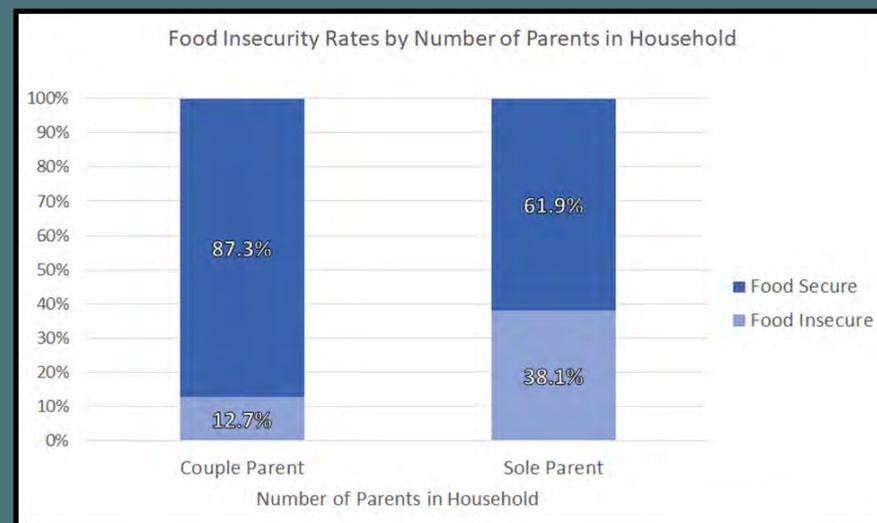


Figure 6: Food Insecure Households - Household Composition (Ministry of Health, 2019)

Debt

Given that low income is a major factor contributing to food security, it is important to consider the nested issues surrounding income. Two major concerns affecting income for poor New Zealanders are debt and cost of housing (P. Waugh, Interview, January 23, 2020; M. Edridge, Interview, January 27, 2020). New Zealanders in economically poorer communities are targeted by loan sharks, who offer to finance household goods, only to later gouge customers with compounding interest rates (P. Waugh, Interview, January 23, 2020). In their 2020 *State of the Nation Report*, the Salvation Army classified “problem debt” as one of four major social hazards, along with alcohol, illicit drugs, and gambling (Tanielu, R., Barber, P., and Wijeyasin, 2020). “Exploitative” lending “can trap people and whānau in debt traps or debt spirals” (Tanielu et. al., 2020, p. 56). The Salvation Army attempts to alleviate this problem with interest-free loan programs (P. Waugh, Interview, January 23, 2020), and by running “Good Shop vans to provide safer and more ethical lending and mobile shopping in poorer communities” (Tanielu et. al., 2020, p. 57).

While there has not been research directly linking food insecurity to debt, there is evidence that debt is linked to low income. In their work, which discussed the determinants of food insecurity in New Zealand, Carter et. al. noted that “low income households end up in debt partly due to having inadequate income to meet their household expenses” (2010). This can create a cycle of negative feedback for poor families in New Zealand, affecting disposable income to spend on an adequate quantity of nutritious food, contributing to food insecurity.

	Total		Male		Female	
	n	%	n	%	n	%
Food Insecure	3,000	15.8	1,020	11.7	1,980	19.4
Often no fruit and vegetables						
No	2,555	85.2	885	86.8	1,670	84.3
Yes	445	14.8	135	13.2	310	15.7
Buy cheaper food						
No	145	4.8	60	5.9	90	4.5
Yes	2,855	95.2	960	94.1	1,890	95.5
Used food banks/food grants						
No	2,355	78.5	825	80.9	1,530	77.3
Yes	645	21.5	195	19.1	450	22.7

Note: The numbers of respondents are random rounded to the nearest multiple of five, with a minimum value of 10, as per Statistics New Zealand confidentiality protocol.

Figure 7: Demographics and social-economic determinants of food insecurity in New Zealand in 2004/2005 (Carter et al., 2010)

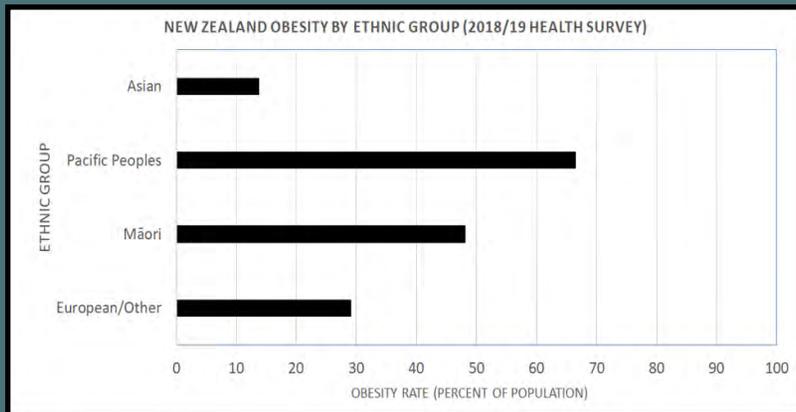


Figure 8: Obesity rates among major New Zealand ethnic groups (Ministry of Health, 2019)

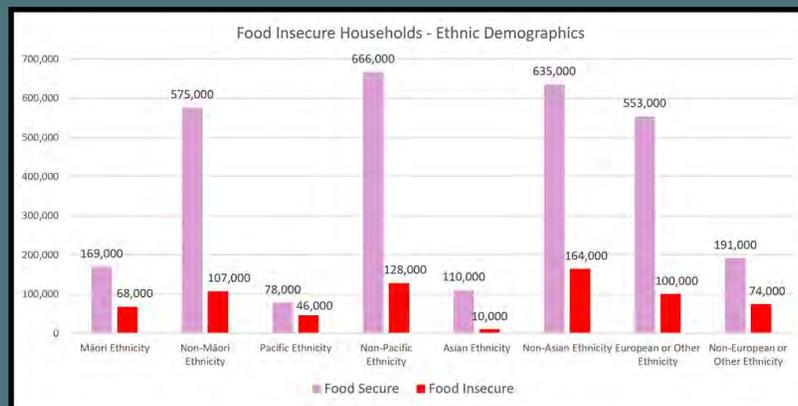


Figure 9: Food Insecure Households - Ethnic Demographics (Ministry of Health, 2019)

Housing

The Salvation Army's 2020 *State of the Nation Report* (Tanielu et. al., 2020), showed that housing affordability gradually worsened over the past decade. As of 2019, the cost to buy a new home outside of Auckland averaged 8.1 years income; an increase from 7.5 years in 2018, and up from 6.3 years average in 2015 (Figure 10) (Tanielu et. al., 2020). Change in average wage over time shows that the number of years of income required to purchase a median-priced house increased throughout New Zealand. The report also states that the city of Wellington, specifically, has seen a decrease in rent affordability over the past decade. The Ministry of Business, Innovation, and Employment's (MBIE) 2020 report highlights that in December 2009, an individual had to work a total of 11.4 hours to pay the average rent of \$361 NZD (\$238 USD) a week (MBIE, 2020). That burden climbed by December 2019, when an individual had to work an average of 13.3 hours to pay the average rent of \$558 NZD (\$368 USD) a week (MBIE, 2020; Tanielu et. al., 2020). Over a 12-month period ending September 30, 2019, housing-related debt rose by 16.6 billion dollars NZD (\$11 billion USD) (Tanielu et. al., 2020).

The Ministry of Social Development (MSD), responsible for New Zealand's social benefits system, has indicated that the demand for housing is growing across New Zealand and the immediate need for housing assistance is rising. Consistent with the Salvation Army's State of the Nation report, the MSD also reported a shortage of affordable housing, resulting in increasing rental costs (MSD, n.d.-a). The Housing Quarterly Report is put out by the Ministry of Housing and Urban Development (MHUD) in order to track progress and determine where additional support is needed. According to this report, in the quarter ending June 30, 2018, 646.6 million dollars NZD (\$426.8 million USD) was provided for total housing support by the Ministry (Figure 11) (MHUD, 2019).

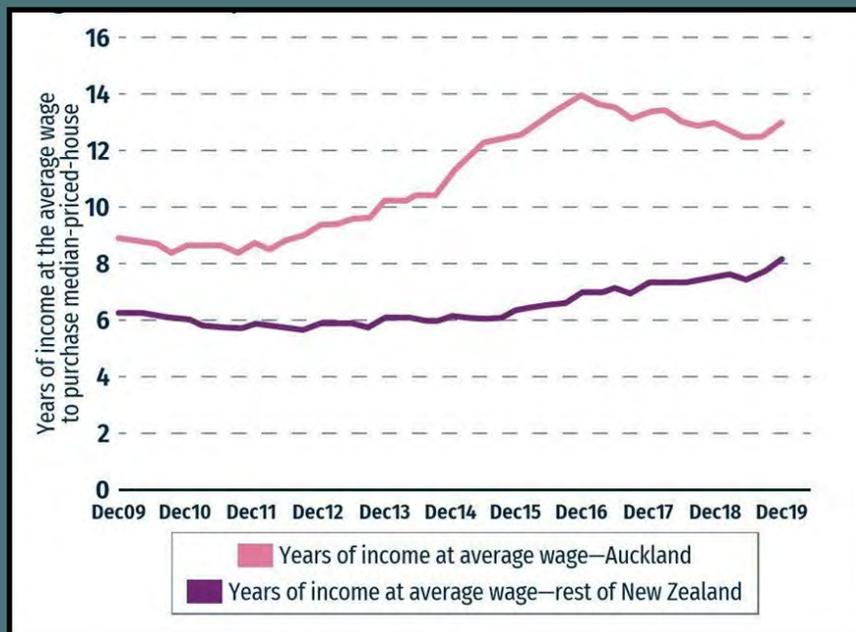


Figure 10: House price-to-income ratios: 2009-2019
(Tanielu et. al., 2020)

Along with emergency housing, the Ministry provides support for transitional housing by collaborating with Housing New Zealand (HNZ) and various transitional housing providers (MHUD, 2019). “People living in transitional housing pay rent of up to 25% of their income, which is in line with income-related rents for public housing” (MHUD, 2019). Transitional housing affords people the opportunity to establish permanent housing, contrary to emergency housing. The burden of high housing costs often forces people to de-prioritize food in their budgets. The MSD works to provide financial assistance in this aspect. There is a large body of governmental and scholarly research (Tanielu et. al., 2020; MBIE, 2020; MSD, n.d.-a; MHUD, 2019) to support these claims, as well as hard data showing the increasing housing assistance grants granted by the MSD (Figure 13). The Wellington City Mission and Salvation Army, in addition to providing food relief, also provide transitional and/or emergency housing to help address the intertwined issues of housing costs and food insecurity.

Food Insecurity and New Zealand Ministries

Four ministries in the New Zealand national government have direct policies and programs pertaining to food insecurity, plus a unit within the Department of the Prime Minister and Cabinet that focuses on child poverty. At the local level, a unit of the Wellington City Council has food-related initiatives in the arena of community gardens (Table 2). Government-sponsored programs vary in size and funding, depending on which ministry is responsible for the program and program goals.



Figure 11: Total housing support provided by the Ministry of Social Development’s Quarterly Report (MHUD, 2019)

Table 2
Relevant government entities of food insecurity programs or policies

	<p>“We help New Zealanders to be safe, strong and independent. Manaaki Tangata, Manaaki Whānau”</p> <ul style="list-style-type: none"> • Benefit System • Hardship Grants • Welfare Overhaul Work Program • Families Package • Breakfast in Schools Program • KidsCan
	<p>“We connect, engage, influence, and mobilise action across New Zealand to care for, manage, and invest in our natural resources wisely, so our environment thrives along with our economy and people”</p> <ul style="list-style-type: none"> • Waste Minimization Fund
	<p>“We're the Government's lead advisor on New Zealand's education system. We shape direction for education agencies and providers and contribute to the Government's goals for education. We shape an education system that delivers equitable and excellent outcomes.”</p> <ul style="list-style-type: none"> • Free and Healthy Lunches in Schools Program



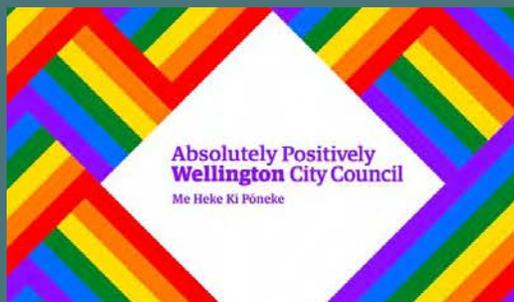
“The Ministry of Health leads New Zealand’s health and disability system and has overall responsibility for the management and development of that system.”

- New Zealand Health Survey
- Fruit in Schools Program
- Primary Health Care Projects
- Healthy Families New Zealand



“DPMC’s purpose is to advance an ambitious, resilient and well-governed New Zealand. This means providing high-quality impartial advice and support services to the Prime Minister, Cabinet, and the Governor-General daily. In addition, DPMC helps coordinate core public service departments and ministries.”

- Child Poverty Reduction Act



“Everything we do, we do for Wellington. Our Environment, economy, history, but most importantly, our people– residents, business people, visitors and diverse communities.”

- Waste Minimization Plan
- Love Food Hate Waste
- “Stone Soup” Fund

Ministry of Social Development (MSD)

The Ministry of Social Development provides financial support, advises the government on social policies, provides housing assistance, and funds community service providers (MSD, n.d.-b). Brett Cameron, an Advisor of the Client Service Delivery Team of the MSD, he stated that for the 2020 agenda, the Minister of Social Development identified five areas to improve: Employment, housing, better quality service for clients, income support, and better partnerships with key organizations (MSD, 2019-b). There is also a stipulation to “achieve 85,000 sustainable exits of employment” (B. Cameron, Interview, February 15, 2020). Katie Grace, another Client Service Delivery Team advisor, referred to these challenges as a five-footed tripod (Figure 12). “One of those links being uneven usually causes further instability for our people...Ensuring that they’ve got good income support or getting them into employment is going to lead to positive outcomes for them and their families” (K. Grace, Interview, February 15, 2020).

The Ministry of Social Development runs the benefits system in New Zealand, which provides funds to vulnerable members of society, including the unemployed, elderly, and the financially struggling (MSD, n.d.-b). The benefits system includes a system of grants for financial assistance for emergency costs, which include disability-related inability to work, unemployment, chronic health conditions, and domestic strife. These are known as hardship grants and are given on top of regular benefit payments. Several of these hardship grants can be used for food, including: The Special Needs Grant, Recoverable Assistance Payments, Emergency Benefits, and the Advance Payment of Benefits. These four grants address issues, such as food insecurity, that do not fit into one of the conventional grant categories (MSD n.d.-c). Grants vary in their income and beneficiary status requirements, but all provide funding for the food insecure; however, the Special Needs Grants is the main

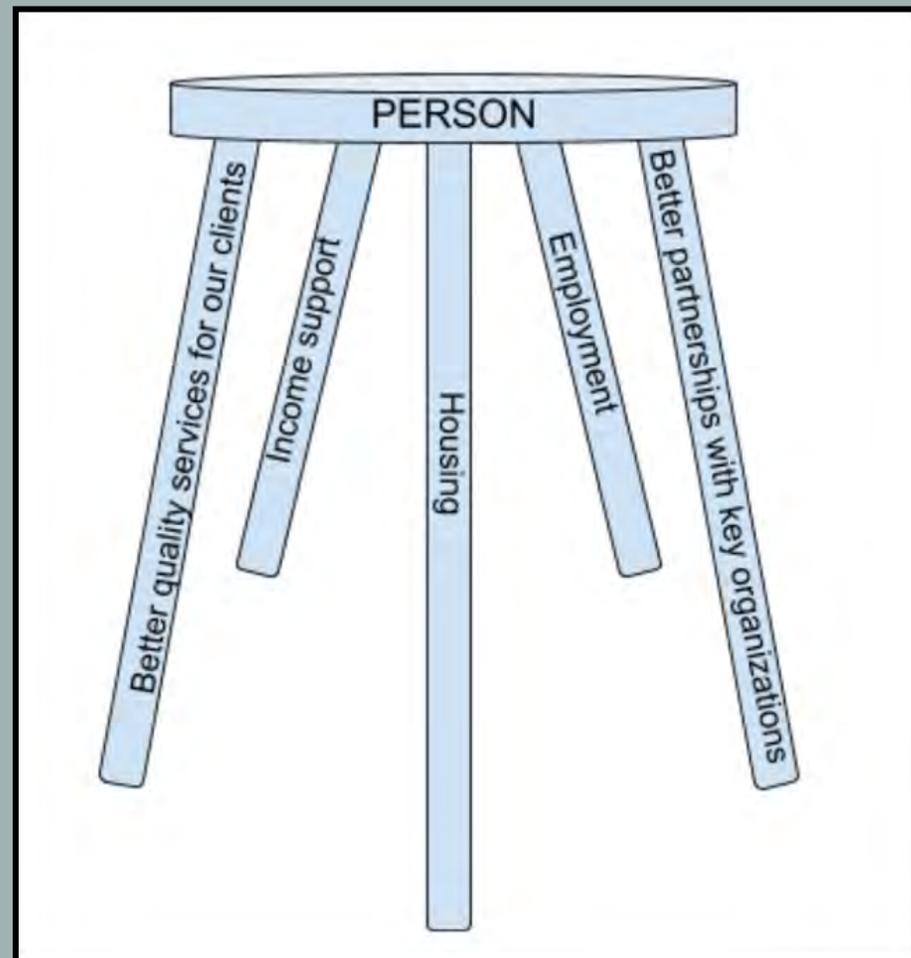


Figure 12: Five-footed tripod of stability for New Zealanders on benefits

grant used for this purpose. The Ministry of Social Development does not have any benefit payment or grant specifically for food insecurity or hunger, which is why the Special Needs Grant is primarily used for food-related emergency cost payments. Katie Grace noted that “food comes under something we call a special needs grant...it’s not a specific benefit” (Interview, February 15, 2020).

The Ministry of Social Development offers financial assistance to purchase food to clients, both on benefit and off benefit. However, clients must meet an income threshold if they

are off benefit, which is different for families versus individuals. For example, “a single person on benefit, or off benefit if they meet the income threshold, is entitled to \$200 NZD (\$126 USD) of non-recoverable food assistance, under the umbrella of Special Needs Grants, every six months.” If they qualify, an individual would receive a payment card that only works at listed suppliers, such as major supermarkets. The payment card can also be used for household supplies as well as food, but it cannot be used for alcohol, gift cards, and cigarettes.

Between December 2014- December 2019, the number and value of hardship **grants for food increased drastically** (Figure 13 and Figure 14). The Ministry of Social Development’s *Benefit Fact Sheets Snapshot- December 2019 Quarter* shows

that all other reasons for hardship grants remained relatively constant throughout the five-year period, **while grants given for food more than tripled in number. The monetary value provided for both food and housing grants increased sharply as well** (Ministry of Social Development, 2019-a). This suggests a rise in food insecurity and housing-related financial issues. These two issues appear closely intertwined, as they have consistently risen and fallen along the same timeline. This pattern also parallels findings from research and data on the rise in housing costs/lower share of income as a main contributor to food insecurity in New Zealand.

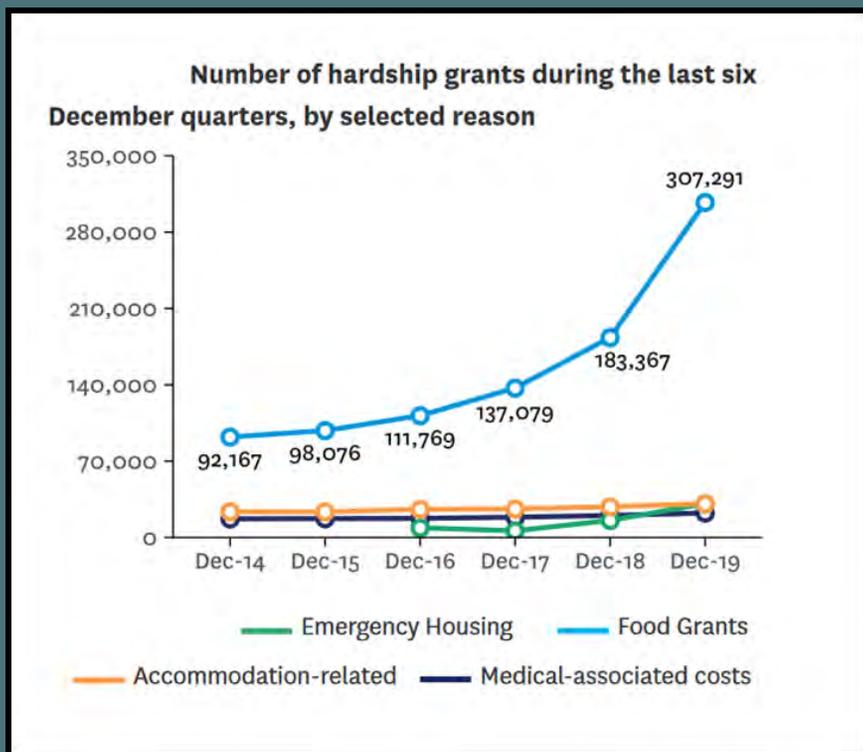


Figure 13: Number of Hardship Grants in past six December quarters (Ministry of Social Development, 2019-a)

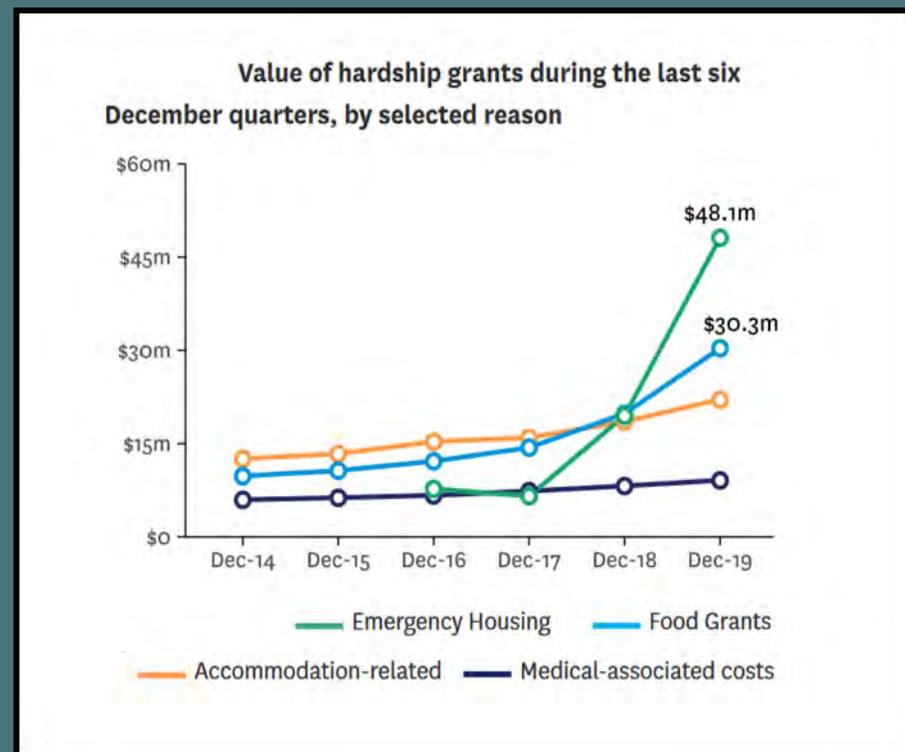


Figure 14: Value of Hardship Grants during past six December quarters (Ministry of Social Development, 2019-a)

As part of an inter-party agreement between the Labour and Green parties of New Zealand, the current national government committed to modify the benefits system in New Zealand, in the form of the Welfare Overhaul Work Program in November 2019. The goal of this program is to change the way benefits are distributed, provide more income support, and increase payments to the disabled and those with health conditions (Ministry of Social Development, 2020). This program is designed to “lift children and their families out of poverty” (Ministry of Social Development, 2020). The Families Package has a goal of reducing child poverty and providing income support to families. It aims to help low-income earners with children, promoting food security among a vulnerable population.

Ministry for the Environment

New Zealand’s Ministry for the Environment is responsible for the conservation of New Zealand’s natural environment and resources. As part of New Zealand 2050 carbon neutrality goal, the Ministry focuses on sustainability, waste minimization, and emission reduction (mfe.govt.nz). The ministry’s efforts to reduce food waste are part of its sustainability and waste minimization initiatives, which are supported, through the Waste Minimization Fund. The Fund “increases resource efficiency, reuse, recovery and recycling and decreases waste to landfill” (mfe.govt.nz). The Waste Minimization Fund provides funds for food redistribution organizations, such as the Free Store, Kaibosh, and Kiwi Community Assistance (described in Chapter 4), thereby accomplishing its goals through nongovernmental channels, without direct oversight of all waste minimization initiatives.



Ministry of Health (MoH)

The Ministry of Health oversees various programs and projects to help combat food insecurity. The Ministry runs the annual New Zealand Health Survey, and they plan to add more questions pertaining to food insecurity (C. Byrne, Interview, February 17, 2020). In 2005, the ministry implemented the Fruit in Schools Program, in an effort to encourage children to adopt healthy lifestyles and increase awareness of the benefits of physical activity. The program provides fresh produce each day to students at eligible primary schools. Healthy Families New Zealand is a large-scale MoH initiative focusing on improved nutrition in families that began in 2014. The initiative supports communities in thinking about the root causes of poor health and encourages them to change the environments where children live and learn at the social and physical levels (Healthy Families New Zealand, 2015). One of those environments is food outlets. In November 2018, Healthy Families New Zealand released a Summative Evaluation Report, updating the findings from the national evaluation after the first three years of implementation (Healthy Families New Zealand, 2015). The report highlighted that improving the food system has been a successful area of development through establishing food gardens in community spaces (Healthy Families New Zealand, 2018).

Ministry of Education

The Ministry of Education implemented a trial of the Free and Healthy Lunch in Schools Program in the first quarter of 2020. With this program, “thousands of year 1-8 students will be offered a free and healthy lunch in a new program to be in schools in Term 1, 2020”

(Ministry of Education, 2020). The program was implemented at 43 schools “with high levels of disadvantage” spread across the Bay of Plenty and Hawke’s Bay regions within New Zealand. If the trial phase of this program is successful, it will be fully implemented beginning in 2021. (Ministry of Education, 2020) The program was borne out of a desire to reduce child poverty in New Zealand as part of the Child and Youth Wellbeing Strategy, a new government approach to addressing societal issues relating to child poverty, championed by current Prime Minister Jacinda Ardern (Child and Youth Wellbeing, n.d.).

Department of the Prime Minister and Cabinet

The Department of the Prime Minister and Cabinet (DPMC) serves as a liaison between ministries. The department’s role includes stimulating and encouraging collaboration among ministries to put plans into action. Currently, one unit focuses on child poverty and aims to increase the wellbeing of children around New Zealand, because “the Government wants New Zealand to be the best place in the world to be a child” (DPMC, 2019). Together, these two units create, the Child Wellbeing and Poverty Reduction group. The group was established to support the Minister for Children, Prime Minister Jacinda Ardern (DPMC, 2019).

Wellington City Council

The Wellington City Council (WCC) created a waste minimization fund for organizations that engage in sustainability efforts in Wellington. These include funds to minimize food waste. The Wellington City Council also participates in the Love Food Hate Waste campaign, which





educates citizens on food waste and its reduction. The WCC also funds community gardening through their “Stone Soup” fund, which provides funds to gardening groups, with the expectation that participants use the money only for supplies that they cannot already donate to the garden and share with the group. Community gardens may not directly address food insecurity, but gardeners use vegetables and fruits grown in the community garden to supplement their diets.

Current Political Party in Power

The party and Prime Minister in power at any given time provides New Zealand's Parliament and various ministries with policy direction and program priorities. Therefore, the ability of the government to provide a structured approach to addressing the issue of food insecurity varies with the political goals of the current government (M. Dagger, Interview, January 22, 2020; N. Peacock, Interview, February 11, 2020). On October 26, 2017, New Zealand elected Jacinda Ardern as Prime Minister, where she leads the Labour Party in Parliament. Under her leadership, the Labour Party increased the support, funding, and promotion of food insecurity-related societal reform, especially those relating to child poverty. Because New Zealand holds a new election for Prime Minister every three years, there is some volatility in food insecurity-related policies and strategies from the government. The next election will take place in September 2020, casting uncertainty on the state of food insecurity policy for the next few years. (D. Provoost, Interview, February 7, 2020; N. Peacock, Interview, February 11, 2020)

Summary

New Zealand's food insecurity problem is closely tied to the nested problems of inadequate income and rise in housing costs. Food insecurity is often associated with obesity, especially in urban areas, and disproportionately affects the Māori and Pacific Islander populations. Food insecurity also disproportionately affects women and single parent households, those two conditions often occurring together. Both government ministries and nongovernmental charities are responsible for addressing the problem, but each individual ministry or organization approaches the issue of food security from a different angle.

*Alan Cooper
Free Store Volunteer*

"The Free Store does a really great effort in helping the less privileged."

After growing up in Hampshire, England, Alan traveled the world, living in Greece, Australia, and Israel. He finally settled in New Zealand 20 years ago, where he lived in the bush for a year, to temporarily "take a break from society." Once he came out of the woods, Alan worked at a mental health clinic. Alan is a new volunteer at The Free Store, but he has totally immersed himself and volunteers five times a week. He thinks "The Free Store does a really great effort in helping the less privileged." In the past, Alan has "dumpstered" around Wellington and scavenged for scrap food just to sustain himself. The food provided by The Free Store "is much better, and is better served in the hands of people who need it, rather than being thrown out in the rubbish."





Methodology

In this chapter, we discuss the research methods we used to assess, identify, and understand the roles of the stakeholders regarding food insecurity in Wellington. Each method was selected based on the type of stakeholder and the type of data we sought to gather. The most important stakeholders are those directly impacted by food insecurity. These are people who lack access to adequate quantity or quality of food, and who suffer as a result. The experiences of this group are critical to gain an individual perspective on the state of food security in New Zealand. The national and local governments are also of interest in this project as they are directly responsible for and involved with food security programming and funding throughout New Zealand. The final group of stakeholders are the local and national NGOs engaged in relief of food insecurity. These organizations are often responsible for the actual provision, collection, and distribution of food. We conducted semi-structured and unstructured interviews, participant observation, and we created network maps and profiles of NGO volunteers to showcase the human experience and individual perspective of food insecurity.

The goal of this project was to assess the state of food insecurity in New Zealand. We identified three main objectives necessary to accomplish this goal (Figure 15):

- 1) Assess the national and local government's role in addressing the issue of food insecurity
- 2) Identify non-governmental and other organizations that address hunger and food security in Wellington
- 3) Determine relationships between policymakers and food relief providers



Figure 15: Goal and objectives of the project

Objective 1

Assess the national and local government's role in addressing the issue of food insecurity

Our first objective was to assess the national and local government's role in addressing food insecurity. We employed two methods to accomplish this. We conducted archival research on existing policies to examine current laws and policies related to benefits funding and relief of food poverty, and how they impact the population of beneficiaries, and relief organizations.



Figure 16: Jason and Ben getting hands on experience volunteering at Kaibosh Food Rescue

We also conducted semi-structured interviews with government officials in the Sustainable Food Initiative from Wellington City Council, and the national Ministry of Social Development. This type of interview gave us flexibility while maintaining structure in our interview process, which was important because it “provides a framework that helps ensure all the important issues are covered in time” (Ward, 2014). We obtained our interviews by convenience sampling. Interviews with governmental experts provided insight into future policy plans. Government officials connected us with other policy makers in the domain of food insecurity and food poverty alleviation. This snowball sampling strategy allowed us to gain a larger network of contacts.

Objective 2

Identify non-governmental and other organizations that address hunger and food security in Wellington

We analyzed non-profit, non-governmental, and community-based organizations, located in Wellington, that are involved in the relief of food insecurity. We sought thorough understanding of the distribution channels and difficulties in food access. The team located five relief programs that aid food insecure residents through research and referrals from snowball sampling.

As a form of participant observation, we volunteered at Kaibosh Food Rescue and the Free Store, to observe and document how each organization runs (Figure 16). We witnessed and experienced food collection, sorting, and distributing. The team

helped sort food items to be sent out for distribution, and teammates walked around the city with volunteers to collect leftover food items from various cafes using a shopping cart. Volunteering gave us the opportunity to interact with staff, other volunteers, and individuals directly affected by food insecurity. Through casual conversations with volunteers, we were able to gain their perspective on food insecurity. Working side-by-side with these individuals helped us build relations within the community. We created multiple in-depth profiles of various social service workers and food insecure individuals, to showcase individual experiences with food insecurity and/or of those who provide direct services.

We conducted semi-structured interviews with staff and volunteers at Kaibosh Food Rescue, the Free Store, Salvation Army, Wellington City Mission (WCM) and Kiwi Community Assistance (KCA), to understand their approach to reducing food insecurity. Semi-structured interviews enabled us to hear the stories and experiences of the staff, to explore their motivations relating to their work, and to gain an understanding of the organization's strategies and goals. The loose and flexible nature of a semi-structured interview provided the comfortable environment and conversational interaction necessary to collect this data (Ward, 2014).

Lastly, we utilized photography to document the various relief organizations. These photographs are a record of our volunteer experiences and they portray the impact these organizations have on the community. Photography helped provide visual context and depth to our qualitative and quantitative data.

Objective 3

Determine relationships between policymakers and food relief providers

For the final objective, the team sought to understand connections between the three main stakeholders, those directly impacted by food insecurity, the national and local government, and local and national NGOs. We analyzed the distribution of food and how food physically travels between stakeholders, funding sources, and various levels of collaboration between organizations. Through participant observation at NGOs, we observed whether food was being distributed directly to individuals in need, or if it was administered at an organization level. Similar to objectives 1 and 2, the team conducted semi-structured interviews with governmental officials, as well as NGO staff and volunteers to understand funding and collaboration.

We created a network map to visually demonstrate the structure of food insecurity alleviation at the national and local levels within New Zealand. This form of documentation helps identify the movement of political, financial, and physical resources to provide food poverty relief in New Zealand.

Data Management

The group took notes during interviews and collected audio recordings of some interviewees. These interviews were transcribed and coded for use in this report. At the end of the term, they were deleted from the recording device. All consent forms and interview notes were collected and provided to our project sponsor, Professor Michael Elmes.



Findings

Objective 1: Assess the national and local government's role in addressing the issue of food insecurity

Government Coordination

The Office of the Children's Commissioner (OCC) is an independent crown entity, meaning it is government funded, yet independent from policy decisions. The Office acts as a watchdog for the government, monitoring childcare services, advising policy related to children's wellbeing, collecting data related to children's issues, and advocating for children according to the United Nations Convention on the Rights of the Child (OCC, n.d.) (Table 3). The Child Poverty Monitor is a joint project with the Office of the Children's Commissioner, the JR McKenzie Trust and Otago University. Donna Provoost, Director of the Strategy, Rights and Advice team at the Office of the Children's Commissioner, explained the monitor as a system of indicators to define and detect child poverty. This monitoring performed by the OCC provides data on the issues surrounding child poverty (D. Provoost, Interview, February 7, 2020). The Child Poverty Monitor 2018 provided new data on the four factors that most affect child poverty in New Zealand. One of those factors is food insecurity (OCC, n.d.). Director Provoost explained that the OCC's discussions with government ministers have evolved to "focus on holistic wellbeing and people," (D. Provoost, Interview, February 7, 2020).

In this Section:

Objective 1

Government Coordination

Objective 2

Shared Values

Equality

Food Dignity

Mana-enhancing practice

Food Waste

Objective 3

NGO Coordination

Government and NGO Coordination

Limitations

From interviews at the Ministry of Social Development, Ministry of Health, and the Department of the Prime Minister and Cabinet (DPMC), we found minimal inter-ministry coordination on food insecurity as a nested problem. We also found that ministries have specific and separate focuses and agendas, which impede efforts to address food insecurity in a unified way. However, when investigating programs within the DPMC, we found that the Child Poverty Unit of the DPMC coordinates inter-ministerial efforts related to the Child Wellbeing Strategy, which covers food insecurity at the family level. Barbara Annesley, Principal Analyst for the Child Poverty Unit, explained that child wellbeing covers multiple areas such as, “housing, income, [and] food insecurity” (B. Annesley, Interview, February 14, 2020). When asked to speak to the challenges in passing new policy, Kristie Carter, Director of the Child Poverty Unit under the DPMC, explains how her unit must work through other agencies “in order to get anything done” (K. Carter, Interview, February 14, 2020). Thus, the DPMC facilitates the creation and testing of programs involving different ministries. For example, the Free and Healthy Lunches in Schools program is the result of a DPMC policy, but it is implemented by the Ministry of Education and overseen by the Minister for Children, Minister of Education, and the Minister for Child Poverty Reduction (Figure 17). Looking to the future, Ms. Annesley states that the DPMC is “starting to do a little more thinking about food insecurity beyond school lunches” (B. Annesley, Interview, February 14, 2020). To begin this process, she explained that the unit will “bring in everyone from the relevant agencies so that everybody knows what's going on,” in order to determine “where the interests are and whether there is any interest in working together” (B. Annesley, Interview, February 14, 2020). However, they did not specify any specific plans to address food insecurity beyond school lunches.



Table 3: Organization that contributes to the coordination of the government ministries

<p>Coordinating Organization</p> <p>Office of the Children’s Commissioner</p>
<p>Their Mission</p> <p>“All our work aligns with our vision to make New Zealand a place where all children thrive.”</p>
<p>What they do</p> <p>A government-funded crown entity that promotes the wellbeing of children.</p>

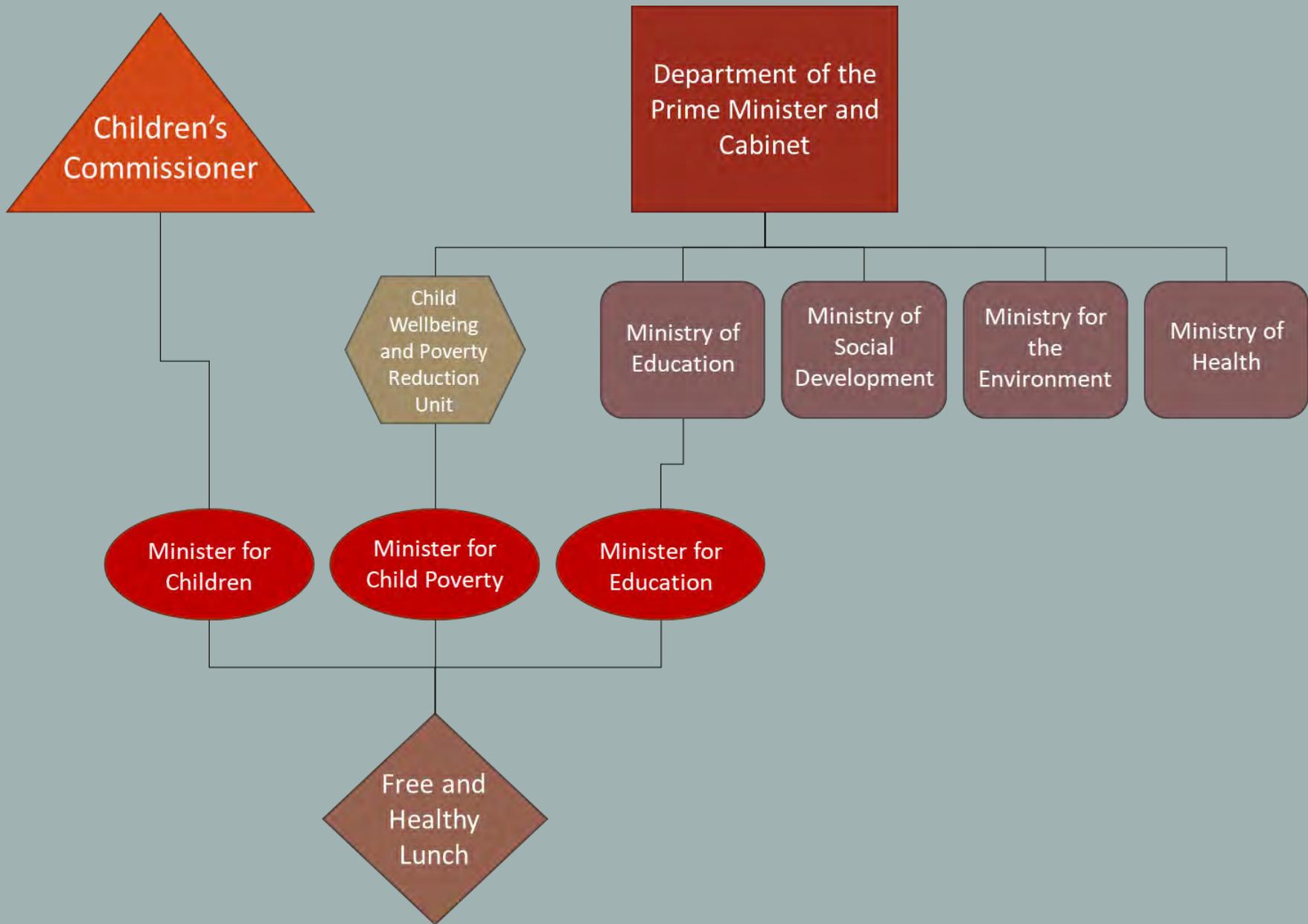


Figure 17: Network diagram displaying the relationship of government and non-government entities





PLEASE DO NOT
STACK BOXES HIGHER
THAN HERE.
THANK YOU

BONITA
PREMIUM BANANAS

BONITA
NANAS
AT 58 °F OR 14 °C

FRUMORE
Fresh Bananas

BONITA
PREMIUM PACK

BANANAS DE MEXICO
Amorita
Frutadeli

ORGANIC BANANAS
ekoke

BANANAS DE MEXICO
547

BANANAS DE MEXICO

FRUMORE
super premium quality

BANANAS DE MEXICO

*Fionn Peat
Kaibosh Volunteer*

“I feel like you are doing a job that is participating in something bigger which is actually making a difference. I like that”.

After retirement, Fionn began volunteering at Kaibosh. Fionn spent most of her career behind a desk, so it was important for her to find something physical. “I really like the food sorting; I feel like you are doing a job that is participating in something bigger which is actually making a difference. I like that”. She believes that food poverty is a bigger issue than it seems, and hopes the government does more to address the issue. Additionally, she is especially concerned with child poverty and how many children do not have nutritious food. Fionn finds food waste to be morally wrong and likes how Kaibosh addresses this issue at a social and environmental standpoint. “Something that I find absolutely disgraceful [in New Zealand] about the fact that we have food poverty is that we live in one of the most fertile, rich countries in the world.”



Objective 2: Identify non-governmental and other organizations that address hunger and Food Security in Wellington

The team contacted five organizations that provide food relief in the Wellington area. These organizations are split into two categories, food distributors and direct service providers. Food distributors are those that are not in direct contact with the food insecure population. Instead, they distribute food items to direct service providers, who then feed those in need. We contacted two food distributors in the Wellington area (Table 4).

Food Distributor Organizations

Kaibosh is a Wellington-based food rescue organization addressing the issue of why “quality food was going to waste while many people in the Wellington community were going hungry” (Kaibosh, n.d.). Established in 2008, focuses on minimizing food waste in landfills while providing food to those in need. “Kaibosh was a practical and simple solution about moving food from one place to another” (Kaibosh, n.d.). The organization grew quickly and now has more than 240 volunteers across two sites, in Wellington and Lower Hutt. The Wellington location distributes food to 38 organizations around the city (Figure 18).



Figure 18: Boxes for sorting food at Kaibosh Food Rescue (O’Gorman, 2020).



Figure 19: Sorted vegetable box at Kaibosh Food Rescue that will be redistributed

Table 4: Contacted food distributor NGOs in Wellington

Food Distributor Organization	Their Mission	What they do
<p data-bbox="226 315 676 354">Kaibosh Food Rescue</p>  The logo for Kaibosh Food Rescue features the word "kaibosh" in a bold, lowercase, sans-serif font, with "ka" in green and "ibosh" in black. Below it, the words "FOOD RESCUE" are written in a smaller, all-caps, black, sans-serif font.	<p data-bbox="835 428 1432 613">“To be the link between the food industry and those that support people in need.”</p>	<p data-bbox="1482 358 1974 613">A distribution organization that collects, sorts, and distributes food to direct service providers</p>
<p data-bbox="163 764 743 878">Kiwi Community Assistance (KCA)</p>  The logo for Kiwi Community Assistance features a photograph of several hands of different skin tones stacked on top of each other in a circle. Below the photo is a green rectangular box containing the text "Kiwi Community Assistance" in white, bold, sans-serif font.	<p data-bbox="831 938 1436 1338">“Helps communities throughout Wellington by rescuing surplus food and household goods, and redistributing it to frontline agencies working directly with people in need”</p>	<p data-bbox="1482 1013 1974 1268">A distribution organization that collects, sorts, and distributes food to direct service providers</p>

Seven days a week, one or two Kaibosh employees drive electric trucks to collect and sort food from New World and Countdown, two national grocery store chains, as well as smaller local grocery stores in Wellington’s Central Business District (CBD). Most of their food donations are surplus products that groceries would otherwise throw away due to slight deformities, or for being close to their “best before” date (Figure 19). Kaibosh takes what would go into the waste stream and redistributes it to nearby direct service providers. In 2019, a total of 294,712kg of food was rescued. Fruits and vegetables made up 43% of food distributed last year. Fruits, vegetables, meats, and dairy currently constitute 70% of the food items they collect and distribute (Figure 20). When an individual or family is in a food insecure situation, “these are typically the first items neglected” (M. Dagger, Interview January 22, 2020). Kaibosh has a waste stream for any food left over after distribution, although 80% to 90% of donations are high-enough quality for distribution to charities and other direct service providers (M. Dagger, Interview, January 22, 2020). If food products do not meet Kaibosh’s sorting standard, meaning if volunteers would not eat the food themselves due to appearance, those food products are sent to animal sanctuaries or composted to further minimize waste. The organization strives to distribute only nutritious food. It does not accept junk food from its providers. Matt Dagger, general manager of the Wellington location, says that the food rescue organization would rather see potato chips go into the waste system then back into the food system and be distributed (M. Dagger, Interview, January 22, 2020).

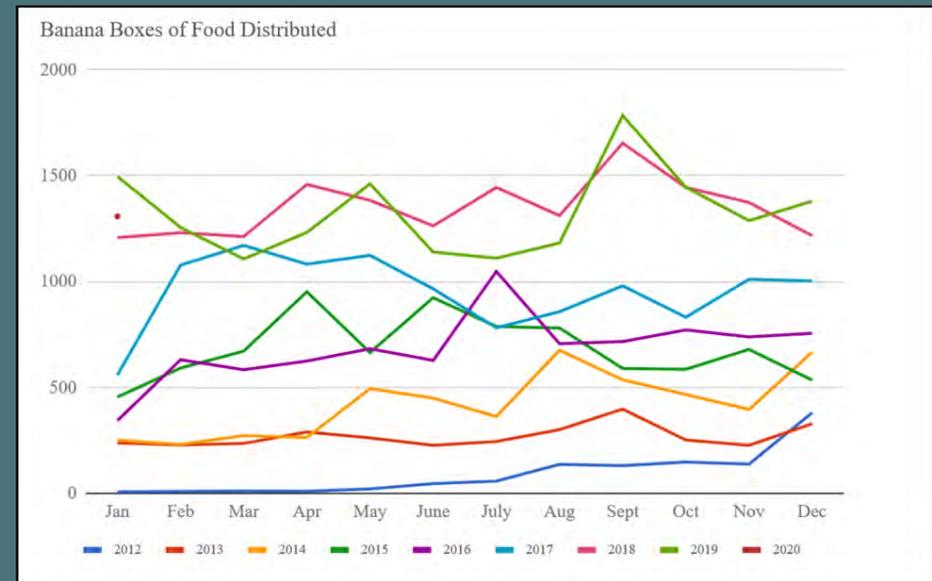


Figure 21: KCA banana boxes distributed (Kiwi Community Assistance, n.d.)



Figure 20: Kaibosh annual report: 2018-2019 (Kaibosh, n.d.)

Kiwi Community Assistance (KCA) is a food redistributor focused on serving the Greater Wellington Region. KCA founders, Tracy Wellington and Phil Davies, began by donating surplus clothing and household items when they began to notice that food item donations were not as abundant as clothing and material items. They began purchasing fresh food, in large quantities, to deliver to various charities as a way to continue helping. That led them to formalize their work and establish the KCA in 2012 to distribute only one food parcel a week to charities. The organization now distributes approximately four tons of food per week. In January 2020, KCA distributed 1,040 banana boxes, 21.2" x 16.0" x 8.3," of food (Figure 21) (Kiwi Community Assistance, n.d.).

In 2019, KCA assisted 65,000 people on the organization's budget of \$80,000 NZD (\$50,008 USD) (T. Wellington, Interview, February 5, 2020). The organization has 82 volunteers. Monday through Friday, volunteers drive to local grocery stores around Wellington, collect food items, and sort the donated food at a warehouse in Grenada North, Wellington (Figure 22, 23). The location is strategically located next to large grocery store warehouses, making it convenient for grocery chains, such as New World and Countdown, to donate food. Once KCA acquires the inventory, food is sorted based on the food bank requests from organizations, such as Wellington City Mission, Soup Kitchen Wellington, and Salvation Army. Food banks go onto the KCA website and place an order, requesting specific items. Then, on the same day as collection, KCA delivers collected and sorted food parcels to the organizations that placed orders. In total, they deliver to 67 agencies in the area. KCA sends questionnaires to their receiving agencies for feedback, and receives daily feedback from the agencies that get their deliveries. Additionally, KCA posts photos of every donation on Facebook, so their donors know where their donations are going, and receiving agencies can see what is available to request online.



Figure 22: KCA banana boxes donated from New World, Porirua (Kiwi Community Assistance, n.d.)



Figure 23: KCA sort ready for redistribution (Facebook March 1)

Direct Service Provider Organizations

KCA does not hold any food products overnight, which minimizes their cost of operation and price per kilo of food redistributed. It costs the organization approximately \$0.33 NZD (\$0.21 USD) /kilo for food redistribution (Figure 24) (T. Wellington, Interview, February 5, 2020).

The team studied three direct service providers that vary in size and services provided: **The Salvation Army, The Free Store and the Wellington City Mission** (Table 5). All of these organizations provide meals to the food insecure, however, the Salvation Army and Wellington City Mission provide additional services, including food banks, housing, and educational classes.



Figure 24: KCA warehouse (Facebook February 13)

Table 5: Direct service provider NGOs in Wellington reference chart

<p>Direct Service Provider</p> <p>Organizations</p>	<p>Their Mission</p>	<p>What they do</p>
<p>Salvation Army</p> 	<p>“Caring for people, transforming lives and reforming society through God in Christ by the Holy Spirit’s power.”</p>	<p>An international Christian organization that helps families by providing housing, food parcels, and classes</p>
<p>The Free Store</p> 	<p>“We freely redistribute quality, fresh surplus food from Wellington's eateries directly to those in need of it. Everyone is welcome”</p>	<p>A grassroots volunteer-driven direct service provider, with 9 locations throughout New Zealand, that collects food from local restaurants to redistribute to those in need</p>
<p>Wellington City Mission (WCM)</p> 	<p>“Centred on Christ’s compassion, we seek to achieve fullness of life for those who are at risk or struggling in the Greater Wellington region”</p>	<p>A regional Christian organization that helps families by providing housing, food parcels, and classes</p>

The **Salvation Army** is a worldwide Christian charity that has operated in New Zealand since 1883. Pamela Waugh, Central Division Community Ministries Secretary, emphasizes that “bottom-line, inadequate income is the root cause for most issues” (P. Waugh, Interview, January 23, 2020). Food insecurity, debt, housing, and family matters are consequences of inadequate income. The Salvation Army offers a wide range of services, including food and clothing assistance, housing services, budgeting advice, addiction support, zero-interest loans, and spiritual guidance. Pam Waugh believes that the biggest challenge is “trying to meet all the demand, especially for housing” (P. Waugh, Interview, January 23, 2020). The organization publishes a quarterly *State of the Nation Report* (see p.14). They work with other New Zealand charities to support the food insecure by sharing resources, data, and “connecting ‘clients’” (P. Waugh, Interview, January 23, 2020). The Salvation Army is a leader among New Zealand’s food charities in terms of size and assistance offered, and is partly responsible for the creation of Kore Hiakai, a national food relief coordination organization (see p.56).

The Free Store collects food Monday through Friday from approximately 70 local cafes and small restaurants in the Wellington CBD and distributes it from a converted shipping container in the Te Aro neighborhood. The organization emerged from a local community art project where people collected food and other items that would have been thrown away. That material was sorted and redistributed. While the pop-up project only lasted a few weeks, The Free Store was established from that initiative. The organization tries to remove the cost barriers of food, and provide access to quality food to anyone who visits the shipping container, attached to St. Peter’s Church. In 2019, The Free Store collected 480,000 items of food. They serve approximately 100 customers every weekday (A. Hathaway, Interview, January 21, 2020). There are approximately 20 to 30 volunteers per evening, who collect food every early evening. They push modified shopping carts around Wellington, from 3:00pm-6:00pm, filling

them with donated food from local cafes and restaurants (Figure 25). Volunteers collect approximately 1,000 food items per evening. At dinnertime, customers line up at a service window in the shipping container to choose items such as a sandwich, pastry, salad, fruit and vegetable.

Alana Hathaway, The Free Store manager, described the organization as not only a food distribution hub, but also as a gathering space and community center, that fosters relationships (A. Hathaway, Interview, January 21, 2020). Many volunteers have a unique connection with the organization, in that they made the progression from client to volunteer: “half of the volunteers have come for food themselves in the past and many people use it as a social space, about half of them are familiar faces” (A. Hathaway, Interview, January 21, 2020). The Free Store allows volunteers to have first pick, incentivizing people to come back and further grow The Free Store community. Everyone is welcome, regardless of age, gender, culture, and more. “The best part about working at The Free Store is relating to people across difference” (A. Hathaway, Interview, January 21, 2020).





Figure 25: Free Store volunteer pushing cart (Comeau, 2020)



The Wellington City Mission is a Christian food and service provider that has served the vulnerable population of Wellington for 115 years. The organization is working on an approach to “eliminating the drivers of food insecurity” (K. Irwin, Interview, January 29, 2020) through four programs: Mission for Independence, Mission for Youth, Mission for Families, and Mission for Seniors (Wellington City Mission, 2020). The City Mission is located in Newtown, Wellington but provides support for struggling families and individuals throughout the Greater Wellington Region. “The assistance we provide includes food parcels, hot meals, advocacy, alternative education, financial mentoring, and social work support” (Wellington City Mission, 2020). Their Newton location has a food bank on site, where premade food parcels are handed out on weekdays. These food parcels are made up from donations from their brown paper bag drive (Figure 26). A brown paper bag food drive collection is held annually, where Wellingtonians receive a bag in their daily mail. Anyone can fill these up, including schools, churches, and workplaces, and these donations get dropped off to the Wellington City Mission. They also have a drop-in center, where hot meals are provided Monday through Thursdays, 9:30am-1:00pm.

According to Wellington City Mission’s 2018/19 annual review, the organization served 23,657 meals that year (Wellington City Mission, 2020). Though the Wellington City Mission provides this food relief service, Mr. Edridge believes that housing is the main issue facing the food insecure community. Therefore, many City Mission’s efforts revolve around providing housing options. The organization does not support short-term emergency housing, and only provides transitional housing because “this gives the ability to work with people and look to establish permanent housing instead of a quick solution that won’t last” (M. Edridge, Interview, January 27, 2020). Wellington City Mission is one of the six core members involved in Kore Hiakai. Tric Malcolm, executive director of Kore Hiakai, used to work at the Wellington City Mission (see p.56).



Figure 26: Food drive donation bag from Wellington City Mission (Comeau, 2020).

Shared Values

We discovered that all five of the organizations we studied share a similar set of nested values regarding the alleviation of food poverty. The four common values that each say are essential to their operation and to provide food assistance to their guests are: equality, food dignity, mana-enhancing practices, and waste minimization. While the precise definition for each term varies slightly between organizations, the general idea behind each concept is relatively constant. We note that these terms heavily overlap in their meaning and implications, but we made distinctions for purposes of explanation.

*Fiona
Free Store Volunteer*

*“I re-create things into something more,
something substantial.”*

Fiona has devoted her life to helping others. She has been volunteering at the Free Store, when she can, for the past few years. About 15 years ago, after an accident prevented her from working, she began volunteering and obtained a full-time position as a chef at the Wellington City Mission, where she utilized her “ability to re-create used food, or leftover food, to create more food that can feed larger amounts of people.” Currently, she works with the elderly who cannot do certain things on their own and attends The Free Store twice a week, collecting food for families she knows that are in need.





*Naomi Peacock
Kaibosh Volunteer*

“[I am] impressed by Kaibosh’s organized approach to tackling food relief.”

After finishing her degree in international relations, sociology, and religious studies, Naomi was interested in doing work related to social inequality and the environment. She sees a growing problem of poverty and food insecurity in New Zealand and believes there needs to be more public awareness and efforts to aid these issues, so she volunteers at Kaibosh. She is “impressed by Kaibosh’s organized approach to tackling food relief.” and she loves Kaibosh’s focus on minimizing food waste. Even though she is busy as a WorkSafe Advisor for the government, she volunteers once every two weeks at Kaibosh

Equality

NGOs use different terminology when they refer to vulnerable populations and attempt to create spaces that break down divisions between people of different socioeconomic status. For example, Wellington City Mission, as well as an anonymous direct service provider, call the vulnerable population coming to their establishments, “guests.” Murray Edridge of Wellington City Mission explained that using the term “guests” instead of “clients” or “recipients” is an effort to remove an “us vs. them” mentality. These organizations say the term “guests” holds a different, and more positive, connotation than the terms “clients” or “recipients.” Food insecure people are “visitors” rather than “customers” or “receivers.” These terms remove some of the formality from the discourse within the organization, creating a comfortable environment for the guests. From a connotative viewpoint, there is less separation between the term “employee,” or “volunteer,” and “guest.” Thus, helping to remove the “us vs. them” mentality.

The Wellington City Mission is in the process of building a community space that contains transitional housing, financial mentoring, office spaces for employees of the Wellington City Mission, a coffee shop, and potentially the “social store” mentioned above. The purpose of this community space revolves around the idea of “shared space” (M. Edridge, Interview, January 27, 2020). The purpose of the shared space is to dissolve the barriers that exist between people of different socioeconomic statuses. The City Missioner explained that this reduces separation between people and eliminates an “us vs. them” mentality. By facilitating the intermingling of people of all backgrounds, the City Mission hopes to foster an environment of equality

and reduce the negative stigma of receiving food aid. Alana Hathaway, manager of The Free Store, says that volunteering there “challenged her own idea around who needs help. Everyone has their own needs and things to offer, it’s a mutual relationship” (A. Hathaway, Interview, January 21, 2020).

A direct service provider, who requested that they not be identified, aims to protect the dignity and privacy of their guests by implementing a strict “no questions asked” policy. No matter what an individual’s criminal, family, or financial history, anyone is welcome, and they are not pressured to share their personal experiences. The service provider does not ask for names or any data, including age, gender, ethnicity, or other demographics. Further, to ensure that the location remains a safe place for its guests, the organization works with local police to avoid officers at the site (Anonymous, Interview, January 16, 2020). It can be difficult for many of their recipients to ask for help, the regular guests served tends to fluctuate seasonally and annually, correlating with prison releases (Anonymous, Interview, January 16, 2020). According to the manager, it takes approximately a week for new guests to realize that the provider location is a safe place. “The first time people come they are still in a ‘prison mindset’ and are protective and ‘tough’” (Anonymous, Interview, January 16, 2020). The guests learn that it is a space where no arguing or fighting is tolerated.



Food Dignity

The term “food dignity” is the ability to choose what food best suits one’s needs, both nutritionally and culturally. Through participant observation, we noticed that food dignity is a shared value among food distributors and direct service providers. However, we found that not all organizations have the same priorities related to it. At the Free Store, the term “food dignity” was introduced as the “idea of choice” as well as “quality of food” (A. Hathaway, Interview, January 21, 2020). The idea of choice revolves around the idea of having the resources available, including physical, financial, and educational resources to choose where to grocery shop, what foods to eat, and how to prepare meals. The manager of the Free Store, noted, “for some people who walk in privilege, the realm of choices is larger” (A. Hathaway, Interview, January 21, 2020).

Kaibosh Food Rescue focuses mainly on the nutritional aspect of the meals they provide to partner charities. Since food distributors are not in direct contact with the food insecure population, providing nutritious food is Kaibosh’s way of showing respect to those who are in need (M. Dagger, Interview, January 22, 2020). The team witnessed this value in action when we sorted food boxes after collection and before distribution (Figure 27). We were instructed to check expiration dates and sorted each box based on the type of food. Before distribution, we opened each box up and examined the vegetables once again to make sure none had browned or shriveled overnight. It could be very easy to overlook a browned vegetable and think that it will be fine for another day. However, volunteers and workers examined food boxes at least three times before organizations picked them up.



Figure 27: Sorted chicken and fruit at Kaibosh Food Rescue to be distributed (O’Gorman, 2020)

To further promote respect, one organization charges guests for meals. Breakfast costs \$2.00 NZD (\$1.29 USD), or guests can purchase a meal card for \$20.00 NZD (\$13.00 USD) which covers 15 meals. The manager said that requiring guests to pay for their meals preserves the dignity of their guests. The manager said that when a guest is able to buy his or her own meal, it no longer becomes charity. The Free Store displayed a similar philosophy. They too implemented the “no questions asked” policy, minding and respecting visitors’ privacy. The Free Store welcomes everyone. Students, working class, travelers, homeless, and hungry all use The Free Store.



Wellington City Mission also focuses on the minimization of charity. They are in the process of relocating to a new site that can incorporate their new vision. This includes a food market that serves as a “social supermarket,” where guests can purchase food at a discounted price. Murray Edridge, the Wellington City Commissioner, explained that the current pre-made food parcels handed out at the City Mission food banks are not ideal for cultural diet limitations or for giving people food choice (M. Edridge, Interview, 2020). This “social supermarket” introduces the idea of choice. The Wellington City Mission wants to mirror the feeling of going food shopping at a grocery store. The space will act the same as a food bank in that the recipient leaves with a food parcel, however, the food parcel is filled with items that the individual will choose. Since the recipient is also paying a small fee, it is no longer considered a handout. “When they buy food, it’s no longer charity” (M. Edridge, Interview, January 27, 2020). WCM aims to decrease the stigma around charity by normalizing the way individuals can receive help.

Not all the NGOs we interviewed consider food dignity a priority. Kiwi Community Assistance focuses on meeting the needs of their partner organizations by providing food, but does not prioritize the nutritional quality of the food. Processed foods, including salty snacks and sweets, are all distributed to various charities and shelters throughout the Porirua and Lower Hutt neighborhoods (Figure 28). KCA allows direct food providers to make their own choice about what kinds of food they provide to their guests, and supplies any food requested.



Figure 28: A box of snack food distributed by KCA (Facebook, 2020)

Mana-enhancing practices

Mana is a Māori concept that may mean prestige, authority, status, and even spiritual energy (Māori Dictionary, n.d.). While English translations do not fully capture its meaning, several service providers noted their efforts to engage in mana-enhancing practices. Mana-enhancing practices, in the context of food insecurity center around the food insecure individual, rather than the food itself. Mana-enhancing practices promote dignity and attempt to treat food insecure guests as equals instead of victims. This was corroborated by the Wellington City Missioner, Murray Edridge. He discussed that mana involves “dignity and pride” and therefore, mana-enhancing practices and food dignity are closely related (M. Edridge, Interview, January 27, 2020). The Salvation Army, Wellington City Mission, and the anonymous direct service provider employ another mana-enhancing practices by hosting educational classes and life skills trainings. These include budgeting, cooking, and gardening. These types of classes share the goal of helping people gain independence from charity.

Food Waste

Our Vision
Zero food poverty.
Zero food waste.

Figure 29: The Vision of Kaibosh Food Rescue (O’Gorman, 2020)



Figure 30: A full shopping cart after a collection shift (O’Gorman, 2020)

New Zealanders are committed to environmental sustainability and conservation, which inspires NGOs to combine environmental considerations with poverty relief efforts. Managing food waste is a main focus of many sustainability and environmental initiatives, and some food distributors we studied stressed the value of reducing food waste. Approximately 157,000 tons of food is wasted annually in New Zealand (Love Food Hate Waste, 2020). Food redistributors attempt to address this by taking food that would go to waste, redistributing it to those in need instead. Many of the NGO managers we interviewed discussed a disparity within New Zealand’s current food system, where the country produces a food surplus, yet there are individuals across the country who are food insecure (M. Edridge, Interview, January 27, 2020; F. Peat, Interview, February 10, 2020). Kaibosh Food Rescue alone has rescued 1 million kgs of food since their founding in 2008 (Kaibosh, n.d.).

A Kaibosh Food Rescue volunteer stated that “It’s great to see food that would otherwise end up going to landfill being sent out to those who need it” (F. McDiarmid, Interview, February 13, 2020). Kaibosh has a food waste system in place to recycle all donated food in some way, which makes the food distribution system a “closed loop system” (Figure 29).

The Free Store is also dedicated to food waste minimization. In fact, The Free Store was created in order to minimize the amount of food wasted by restaurants and cafes in Wellington (Figure 30).

While some organizations such as Kaibosh and The Free Store prioritize the environmental component of minimizing food waste, others do not hold it as high of a concern. Tracy Wellington, manager of Kiwi Community Assistance (KCA), stated that food waste minimization is not a primary goal for the organization. KCA focuses on food poverty relief, but also reuses and recycle boxes and crates.



*Natalia
Free Store Volunteer*

*“When I work at The Free Store, I feel like I’m
earning my food.”*

Natalia works in home care and volunteers at The Free Store nearly every day after work. She had been eating at The Free Store for two years, and noticed that volunteers would get first pick at the food choices. Her favorite food was sushi, but it would always be gone before it was her turn in line. So, she started volunteering at The Free Store so she could get her first pick of food. She now walks the shopping cart and collects food from the Courtenay Quarter Pickup Route and helps clean dishes after her shift, at The Free Store, is over. In her free time, Natalia writes poetry and plays trivia at a local bar on Tuesday nights. She volunteers because of the free food, nice people, her love for walking, and to keep her busy from her depression.

Objective 3: Determine relationships between policymakers and food relief providers

The team created a network map to show how physical and financial resources travel from one stakeholder to the next. Food insecure people are the main focus, and are at the center of the relationship. Food distributors are the “middleman” between policymakers and food relief providers. The network map emphasizes the ways in which food relief agencies, distributors and direct service providers work to serve the food insecure population (Figure 31). Government ministries fund the food distributors. For example, Kaibosh

Food Rescue is funded by the Ministry for the Environment. Food providers, including local cafes and restaurants, as well as private donors and national grocery stores, donate surplus food items to the distributors. If the food is not up to standard, it moves into the waste stream where it either goes to compost or an animal sanctuary. If the food meets distributor’s standards, items are prepared for direct service providers. Direct service providers then provide the food as hot meals or as food parcels in their on-site food banks.

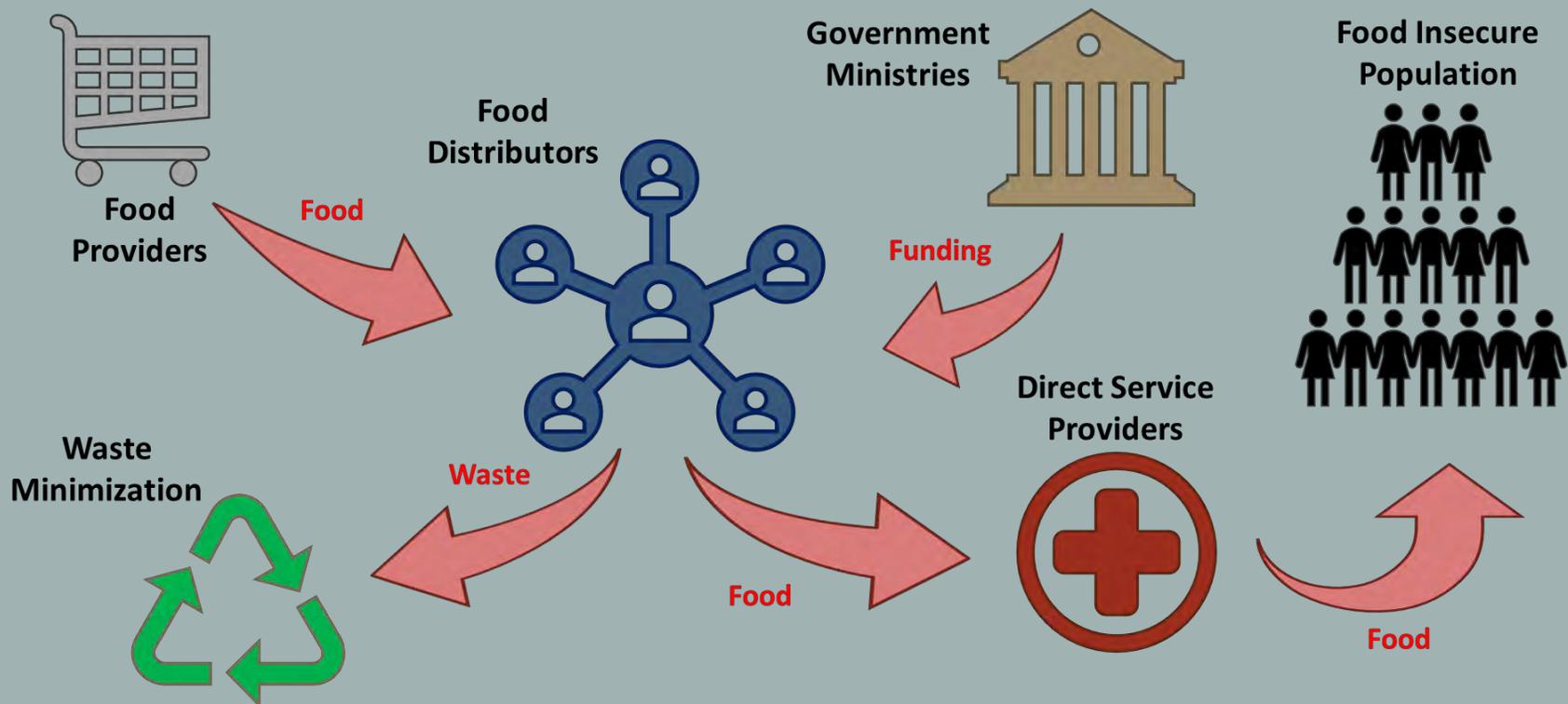


Figure 31: Network map that shows the flow of resources between stakeholder groups



NGO Coordination

Coordination within the network of food relief organizations can be improved upon. The Wellington City Missioner believes that the current food relief landscape in New Zealand is crowded by many organizations working in the same space, that inadvertently compete with one another (M. Edridge, Interview, January 27, 2020). He said that organizations cover similar problems, causing duplication within the food relief system. Since food insecurity is a consequence of larger, nested problems of housing, debt, and poverty, Mr. Edridge describes the current food relief system in New Zealand as just putting a Band-Aid on the bigger issue of housing. Wellington City Mission tries to focus on the root problem and not only on a consequence of that problem. We regularly heard organization leaders say that **housing costs are the leading contributor to income-related food insecurity** (P. Waugh, Interview, January 23, 2020; M. Edridge, Interview, January 27, 2020; E. Haymes, Interview, February 12, 2020; D. Provoost, Interview, February 7, 2020). “Band aid” solutions, like emergency housing, do not address the root issue in a sustainable, long term way. Barbara Annesley, from the DPMC, noted “as you increase the amount of support that’s available for other household costs, you kind of free up people’s budget to spend on food” (Interview, February 14, 2020).

Umbrella Organizations

There are two organizations that coordinate other organizations: Kore Hiakai and Community Networks. The primary purposes of these two non-profit organizations is to coordinate neighboring food relief organizations and increase their communication to create a more efficient food relief system across New Zealand (Table 6).

Table 6: Independent NGO reference chart

<p>Coordinating Organizations</p>	<p>Their Mission</p>	<p>What they do</p>
<p>Kore Hiakai</p>	<p>“To create a food secure Aotearoa New Zealand through sustainable, structural and mana enhancing solutions that ensures all have access to affordable, nutritious, sustainable, culturally appropriate food.”</p>	<p>An umbrella organization of food distributors and direct service providers that aims to coordinate and advocate</p>
<p>Community Networks Wellington</p>	<p>“We enable our members to connect, empower and support each other - face to face, in real time.”</p>	<p>An organization, under the umbrella of Community Networks Aotearoa, that supports Wellington's non-governmental organization sector</p>

Kore Hiakai believes that small-scale food banks are not particularly effective and need coordination. Many NGOs are run by volunteers who have been there for many years and are not necessarily running things efficiently (T. Malcolm, Interview, February 4, 2020). Kore Hiakai's kaupapa, or its goal and purpose, is to coordinate the efforts of existing food poverty relief organizations and to “become the ‘peak body’ delivering leadership, support, practice, research and advocacy for the wider food bank/food rescue sector of Aotearoa” (Kore Hiakai, n.d.). Kore Hiakai, a Māori term which translates directly to “Zero Hunger,” is a relatively new organ-

ization. It began in late 2018 and is composed of six main members: Auckland City Mission, Wellington City Mission, Christchurch City Mission, New Zealand Council of Christian Services, The Salvation Army, and VisionWest Community Trust. In addition to these six organizations, Kore Hiakai helps coordinate 75 other NGO members across New Zealand and aims to fill the gaps of the disconnected current food relief system. Tric Malcolm, the executive director of Kore Hiakai, believes that better coordination will provide structure and help organizations identify systems and efficiencies to better serve food insecure people (T. Malcolm, Interview, February 4, 2020).

By unifying NGOs under one umbrella of coordination, Kore Hiakai hopes to eliminate wasted effort and increase efficiency within the food relief system. Kore Hiakai developed a three-pronged strategy to accomplish this goal (Figure 32).

The first plan to focus on is creating structural change. Through public campaigning, Kore Hiakai hopes to spread awareness and build public support about food insecurity. Tric Malcolm believes that public awareness of, and sympathy toward, the issue of food insecurity could influence legislation and help boost it as a government priority. Kore Hiakai's second focus is mana-enhancing practices, which advocates for “those experiencing food insecurity and poverty to become part of the solution rather than the face of the problem” (Kore Hiakai, n.d.). The last focus is on food redistribution and minimizing food waste. Kore Hiakai wants to develop a “coordinated network of food rescue, transport, and distribution organizations operating both locally, regionally, and across the nation to support and facilitate the zero food-waste movement.”



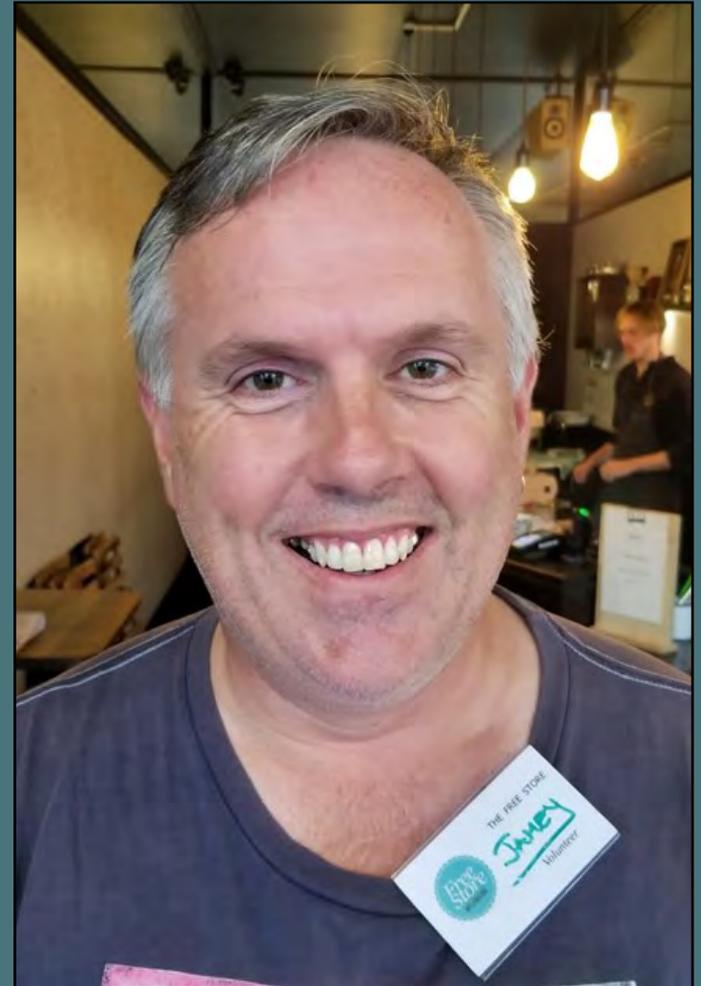
Figure 32: Three-pronged strategy of Kore Hiakai (Kore Hiakai, n.d.)



*James Shepherd
Free Store Volunteer*

“It’s ridiculous that grocery stores can just throw food away!”

James Shepherd has worked as a traffic controller, Uber jump technician, and a Google Street View driver. He is passionate about food waste issues and believes grocery stores should be held responsible for the waste they generate. He takes it upon himself to get to know grocery store staff, so that he can spread awareness about the issue of food waste management. This passion is what led him to the Free Store, where he has volunteered for more than two years. He has worked in food pickup, food preparation, and driving. During his time at the Free Store, James has developed a passion for fairness and equality among volunteers and between volunteers and guests. He volunteers with other organizations as well, including the Red Cross and Cancer Research Center.



The **Community Networks Wellington (CNW)** is a local coordinator between organizations. It works under the umbrella of Community Networks Aotearoa, the national organization. CNW aims to connect NGOs around Wellington and provide a platform for collaboration. The Community Networks Wellington holds a meeting once a month with representatives of NGOs across the Greater Wellington Region. Meetings are used for networking and to build partnerships and request assistance (Figure 33). Many of the attending NGOs are involved with food relief such as the Wellington City Mission. Organizations also use the meetings to promote their initiatives and gain support on new projects.

Government and NGO Coordination

Funding and grants are the main avenue the government uses to aid NGO food relief efforts. Ministries provide grants that align with their agendas. For example, Kore Hiakai is supported by the government through the Ministry of Social Development. The MSD provides funding, in the form of recoverable and nonrecoverable grants, that Kore Hiakai can hand out to individuals needing money for food, appliances, or housing. In addition to funding, the MSD provides Kore Hiakai a representative who communicates between the MSD and Kore Hiakai. Kaibosh's work in the food rescue sector has been funded by the Ministry for the Environment, and they are provided grants, for example, they received grants totaling \$149,379 NZD (\$94,436 USD) in 2019, for sustainability and waste minimization, specifically under the category of "grants for purchase of fixed assets" (Kaibosh, n.d.). With this money, Kaibosh purchased electric trucks for remote food collection. The Salvation Army addresses more issues than food poverty and has government funding for social work. Government contracts from the Ministry of Social Development fund the Salvation Army's temporary housing, counseling, and social work. The local government has the ability to fund local NGOs



Figure 33: Group gathered for the monthly meeting of the Community Networks Wellington (Comeau, 2020)

through the Waste Minimization Seed Fund. Within this fund, an organization can be funded up to \$25,000 NZD (\$15,782 USD), with the priority of minimizing, recycling, and reusing waste materials (Wellington City Council, n.d.).

However, the Wellington City Council is not currently funding NGOs for food relief, and they have no active policy on food access. Katie Irwin, Neighborhood and Community Advisor for Wellington City Council, stated that the council was "working towards a 'Sustainable Food Access Network' policy" which would focus on growing local produce and minimizing food waste in Wellington (K. Irwin, Interview, January 29, 2020). The Wellington City Council's "Stone Soup" fund provides \$12,000 NZD (\$7,720 USD) every year to maintain community gardens in Wellington.

Outside of funding, we found a disconnect in the relationship between NGOs and the government due to a lack of coordination. Brittany Rymer of Wellington City Council stated that “coordination is definitely an area that needs to be improved” (B. Rymer, Interview, January 29, 2020). This disconnection is partly due to NGOs and the New Zealand government not seeing eye-to-eye on food insecurity. The manager of a direct service provider stated that “the national government uses language that is counterproductive to the problem of homelessness and hunger” (Anonymous, Interview, January 16, 2020). The manager explained when attempting to address poverty and hardship, the government used harsh language like “eradicating” the problem.

A reason for the disconnect is also due to governmental lack of transparency around newer projects. During the early testing and prototyping stage for new initiatives, government agencies may keep the details closed to the public. For example, beginning in January 2020, New Zealand started implementing a Free and Healthy Lunch in Schools Program. Kristie Carter of DPMC said that “one of the challenges around the lunch program [was] because it was very budget secret and so we couldn’t talk to anyone about it and... that’s been quite a challenge. We...talked in general...to KidsCan and to the Fruit in Schools people, but we couldn’t specifically talk about that project. But now, we’re starting to go out and talk a bit more and learn from them because there’s a lot of work that they do...especially the work from the Wellington City Mission and the Salvation Army” (K. Carter, Interview, February 14, 2020). Therefore, since the Free and Healthy Lunch in Schools Program was not finalized yet and the budget was not announced, the DPMC considered it a budget secret.

Summary

The team discovered that the government does not have a coordinated plan or set of programs to address food insecurity. Initiatives are a byproduct of programs to address poverty and other broader issues. NGOs, although different in many ways, share the same nested values in the way they conduct their organizations. These values include equality, food dignity, mana-enhancing practices, and food waste. We also discovered that there are organizations established to help promote the coordination between NGOs.



Limitations

Food insecurity is a very broad topic and as our project progressed, we had to narrow our focus. Due to summer holidays in New Zealand, we found it difficult to get in contact with some ministries. Furthermore, parliament was out of session for most of our session, which meant that many government officials and staff were not in Wellington. Due to our short time in New Zealand, we only had time to research five NGOs. These are not the only organizations providing food relief within the country.



Conclusions and Recommendations

Food Insecurity in Wellington

The goal of this project was to assess the current state of food insecurity in New Zealand. Due to New Zealand's reputation as a well-developed country with a strong agricultural system, most people assume that the country is not affected by food insecurity. In reality, food insecurity is a global issue that also impacts New Zealand. Food insecurity in New Zealand exists as part of a wider set of nested problems relating to poverty, including lack of affordable housing, ethnic socioeconomic disparities, low income, and low benefit payment. The recent meteoric rise in cost of housing, especially in urban areas, contributes to rising levels of food insecurity, and exacerbates existing societal problems with debt and domestic strife. The way that food service providers talk about the issue and serve the needs of their guests influences the perceptions and awareness of this issue, removing the invisible barriers created within society. Through interviews with government officials and NGO managers and volunteers and food insecure people, we were able to provide an in-depth analysis of how the food relief system operates within Wellington.

Food insecurity especially affects vulnerable populations and many New Zealand children already face the issue. If measures are not taken soon to relieve them from food insecurity, they will likely struggle to feed their own children and the cycle will continue. The Prime Minister is in office for three years at a time and New Zealand is currently in another election year, which may slow the progress of current governmental work.

In this Section:

Food Insecurity in Wellington

Recommendations

Nutrition

Child Poverty

NGO Coordination

Food Distribution

Individual Perspective on Food Insecurity

Final Reflections

Recommendations

The team identified topics that would benefit from the attention of future WPI researchers and IQP teams. Additionally, we found that many organizations we interviewed would be interested in partnering with WPI to sponsor future IQP projects. We delivered a list of all of the organizations we interacted with during this project, along with names and contact information, directly to our project sponsor and director of WPI's New Zealand Project Center, Professor Michael Elmes.

Nutrition

Nutrition plays a large role in food insecurity and we recommend a deeper investigation of New Zealanders' nutrition. We were able to interview a member of **Regional Public Health** (RPH), an organization based in the Greater Wellington Region that is heavily involved in researching and starting nutrition programs. They currently operate the Wellington Region Fruit & Vege Co-op where anyone can purchase healthy fruits and vegetables in bulk quantities for reduced pricing. We recommend partnering with RPH for a project that could investigate issues relating to poor nutrition on obesity, diabetes, and malnutrition.

Child Poverty

Children in low income households are more vulnerable to issues such as food insecurity. The **Office of the Children's Commissioner** (OCC) does work in data collection on child poverty and related issues. It is also involved in many food insecurity-related initiatives such as the Free and Healthy Lunch in Schools program. While the OCC did



not have a specific project idea in mind, they expressed interest in sponsoring a future project. A future project with the OCC could entail an evaluation of the Free and Healthy Lunch in Schools program and focus on children's nutrition in schools.

NGO Coordination

NGO coordination was a large part of this project that would benefit from further investigation. A future project could further examine and evaluate the network of NGOs and aid the coordination and communication between organizations. A future partner could be **Kore Hiakai**, the organization of organizations which strives to improve the New Zealand food relief system through better coordination. Tric Malcolm, the executive director of Kore Hiakai, expressed interest in working with a WPI team. Future projects could take many forms, as the organization was only created in 2018. This means that there is the possibility for a project to focus on the expansion of the organization and finding new ways for NGOs to connect with Kore Hiakai. Kore Hiakai extends around all of New Zealand and would potentially yield a large-scale project.

During our final week of field research, we observed one of **Community Networks Wellington's** (CNW) monthly meetings. CNW focuses on communication between NGOs in the Greater Wellington Region. Once a month, CNW holds a meeting for local NGOs to discuss the mission of their organization, build partnerships, and seek aid in acquiring resources. Due to time constraints, we did not pursue a follow-up with the other attending organizations or with CNW itself. A future project with CNW could be to develop an online platform to connect NGOs who are unable to make it to the monthly meetings.



Food Distribution

During our field research, we interviewed and conducted participant observations with various food distribution organizations. Our project focused on identifying different food distributors and understanding their work. With that information in place, we now recommend an investigation of the efficiency of their operations. Specifically, a future project could examine current operations and map out the most efficient way to collect and redistribute food. For instance, **Kiwi Community Assistance** (KCA) is a food distributor who purposely located themselves next to supermarket distribution centers to easily pick

up excess food. However, this location is outside the heart of Wellington and further away from charities that KCA distributes to. A future project with KCA could revolve around finding the best and most efficient way to distribute food to other organizations. **Kaibosh**, another food distributor we examined, would also be a worthwhile project partner in the future. Kaibosh places a high importance on preserving the environment when redistributing food and minimizing food waste. A project with Kaibosh could be more environmentally focused, such as mapping and planning the best way of food collection to minimize the amount of driving they do on a weekly basis.



Individual Perspective on Food Insecurity

Initially, part of this project was to investigate people's personal perspective of food insecurity and their opinions on relief efforts. This eventually fell outside the scope of this project and could be investigated in the future. **Wellington City Council** (WCC) expressed interest in developing projects in community centers to aid local residents in need of essential services like food and housing. During our interview with members of WCC, we found they are interested in doing a project investigating community members' perspective on food insecurity. We recommend a future project to either create or assist a program with WCC that examines people's personal opinions on food insecurity.

Final Reflections

Food insecurity is a very prevalent issue that will continue to grow if it is not addressed. Many people, especially outside New Zealand, do not realize that food insecurity is an issue across the country. Our research provides a baseline view of the government's and NGOs' role in the New Zealand food relief system. This project is designed to inform people on the prevalence of food insecurity in the country and recommend future projects. From our experiences interviewing and volunteering, we have seen a strong community that is determined to aid food insecure people in respectful and dignified ways. We are all proud to have witnessed and participated in these community efforts and hope our research will support meaningful change. Below are testimonies from the team about their experiences and their final thoughts.



Derek Comeau

I am very grateful to have worked on this project on food insecurity. I am proud to have worked with the Wellington community. I gained so much from volunteering at the Free Store. It was difficult at first, pushing an oversized shopping cart through the city of Wellington and getting a lot of weird looks from people walking by me, but the satisfaction of knowing I was doing something greater than myself made me comfortable. I also enjoyed the group setting after the work was done. The volunteers would gather for coffee and cake. I value these discussions because they gave me a new perspective on large social issues.

Jason Conklin

Working in New Zealand over the course of the last term has changed my perspective on food insecurity. I volunteered at KCA, Kaibosh, and the Free Store, where I got to see the extreme care that goes into these organization's work. Food insecurity is a society-wide problem in New Zealand, and it was moving to see the dedication and passion of the volunteers and NGO managers. In addition, talking with food insecure individuals showed me the importance of social inclusion, removing the barriers if routine, and the community of the Church. I learned to listen more than speak and I learned that despite its best efforts, the government is a blunt and inefficient tool for solving ingrained problems of poverty and food insecurity, with local communities showing a greater commitment and aptitude for helping those in need. I am grateful to have participated in this project, and I know now the importance of thankfulness and not taking my own situation for granted.



Benjamin Huang

I feel very honored to have had the opportunity to research and participate in helping New Zealand's food relief system. Before this project, I had never heard of the term "food insecurity," let alone how it applied to New Zealand. Working on this project has opened my eyes up and changed my perspective on the issue. Over the past seven weeks, I have had the privilege to meet some wonderful people affected by, or aiding those affected by, food insecurity. I hope that our work on this project can make as great of an impact on others as much as it has had on me.

Paige O'Gorman

From the very beginning, I thought this project could be very impactful. However, I did not realize that it would have a such big effect on me. I had volunteered at my local soup kitchen and participated in annual food drives before coming to New Zealand, but I never thought that deeply about it. After our participant observations at the Free Store, I now have insight to these individuals' perspectives on food insecurity. People would stare at me as I pushed a shopping cart full of food around the city. I saw the familiar faces of those who ate at the Free Store, around the city. I had the privilege of being part of their community and truly felt their value, "everyone is welcome." I hope to share the knowledge and insight that our team gained with those who read our report.



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Appendices

Appendix A: Interview Questions

Interview Questions: Department of the Prime Minister and Cabinet

1. How many policies are in place that relate directly to food insecurity? The Ministry for the Environment focuses on waste minimization, etc.
2. Can you discuss the Lunch in Schools program and how a program like this is implemented?
3. As the Prime Minister's office, do you have any food poverty specific policies that involve multiple ministries.
4. How is the government working together on the topic of food insecurity?
5. While the OCC did not have a specific project idea in mind, they expressed interest in sponsoring a future project
6. Would it be beneficial to eliminate the goods and services tax on fruits and vegetables? Is this possible? What would need to happen?
7. Is there a lot of coordination between the local government and federal government?
8. the government appears to not be in coordination with itself and NGOs, can you speak to that?
9. Have patterns changed at all in the past few years in terms of how many children are affected by poverty and food insecurity?
10. Do you collaborate with any other organizations in addressing this issue?
11. What are the difficulties of passing new policy on this issue?
12. What other government organizations do you work with in order to create these policies?
13. We've found in our previous research that there is a bigger emphasis on childhood poverty. Why?
14. How does this work affect the family level?
15. What would you say is the biggest challenge in working in this field?

Interview Questions: Office of the Children's Commissioner

1. Have patterns changed at all in the past few years in terms of how many children are affected by poverty and food insecurity?
2. Do you collaborate with any other organizations in addressing this issue?
3. What are the difficulties of passing new policy on this issue?
4. Can you tell us more about the child-centered policy that is in place?
5. What government organization do you work with in order to create these policies?
6. Can you tell us more about how the government, NGOs, academics, and businesses work together to address this issues
7. We've found in our previous research that there is a bigger emphasis on childhood poverty. Why? How does this work affect the family level?

General Food Insecurity Questions:

1. What are the main issues with food insecurity in children in NZ? Wellington? Neighborhood?
2. Have you found that food insecurity is a big focus in child-centered policy? Or is it focused more on academics?

Ministry of Health: Health Survey Interview

1. How are the survey questions determined? Do they stay the same?
2. What is the process for adding more food insecurity questions to the survey besides every four years?
3. Can the annual Health Survey include food insecurity questions, such that the Adult Nutrition Survey is unnecessary?
4. Do the results of the survey drive/change policy decisions or funding distribution?
5. Do other ministries (MSD) use the results of the survey? Do you work with any other Ministries in creating questions? How closely?
6. Who is responsible / what experts are consulted when creating the questions?

7. Do you work with any NGOs when creating the food insecurity questions? Or any other?
8. How closely do you work with the DPMC when initiating these surveys?
9. How is Statistics New Zealand involved in doing the survey? Are local health boards funded by the Ministry of Health?

Adult Nutrition Survey (Did not get to ask these)

1. Specifically, for the Food Insecurity questions, how are the responses used.
2. When will you / Are you planning to conduct the next Adult Nutrition Survey? (Last two were 2008/9 and 1997)
3. Why has it been so long since the last Adult Nutrition Survey?
4. Is there any other way of measuring these statistics other than this survey?
5. Why aren't these types of questions prioritized in the yearly survey?

Kore Hiakai Interview Questions

Political Advocacy

1. Can you describe the process of political advocacy, as mentioned in the Kore Hiakai proposal?
2. What does it mean to engage in direct contact with policy makers?
3. How do you think that will provoke change?

Coordinated network of food rescue organizations

1. Does this network include only large organizations (City Missions/Salvation Army), or also small local efforts (churches, community centers)?
2. What is the communication/power structure between all the member organizations?

3. Is this coordinated food distribution system something that would be done through an existing organization like Kaibosh, or is the plan for Kore Hiakai to grow and adopt this role?
4. Is there any need for a screening process on the new organizations you want within Kore Hiakai?
5. Have any organizations declined to join? Why do you think so?

Structural change and “eliminating” food poverty

1. The report mentions the “elimination of food poverty.” Does this mean that Kore Hiakai is dedicated only to implementing increased benefits, or also addressing the food distribution and housing systems as well?

Coordinated network of food rescue organizations

1. Does this network include only large organizations (City Missions/Salvation Army), or also small local efforts (churches, community centers)?
2. What is the communication/power structure between all the member organizations?
3. Is this coordinated food distribution system something that would be done through an existing organization like Kaibosh, or is the plan for Kore Hiakai to grow and adopt this role?
4. Is there any need for a screening process on the new organizations you want within Kore Hiakai?
5. Have any organizations declined to join? Why do you think so?

Appendix B: Sample Consent Form

MEDIA RELEASE with INFORMED CONSENT

Assessing the State of Food Insecurity in New Zealand

The goal of this project is to create an assessment of the state of food insecurity and food accessibility in New Zealand. To meet that goal, we have the following objectives: 1. Assess the government's role in addressing the issue of food insecurity 2. Analyze Nongovernmental Efforts 3. Understand how food insecurity affects individuals.

Project Team Contact Info:

gr-foodnz@wpi.edu

Derek Comeau, Jason Conklin, Benjamin Huang, Paige O'Gorman

Name: _____

I grant the Food Insecurity student research team and WPI the right to record my appearance/voice and participation on audio recording and photography media.

I agree that the Food Insecurity student research team and WPI can use (publish, distribute, exhibit) this material for promotional and marketing materials.

I consent to the Food Insecurity student research team's use of my name, likeness, voice and biographical material in connection with these recordings.

I agree to these recordings without restrictions or limitation.

I release the Food Insecurity student research team, its successors, agents, and all persons for whom it is acting from any liability.

I understand and agree that I will not be paid for my participation or for the use of these photographs, or audio.

Signature: _____

Print name: _____

Address/email: _____

Date: _____

