



A Kitchen has Limitless Possibilities



Feeding 9 Billion Challenge 2024

Presented by CHEF Consulting

A person wearing a pink knit hat with a pom-pom and a dark quilted winter coat is seen from the side, pushing a black shopping basket in a grocery store aisle. The aisle is filled with various fresh produce, including packaged carrots, celery, and leafy greens. Price tags are visible above the shelves, some featuring the 'insiders collection' logo. The text 'What forms of economic support can the government undertake to reduce household food insecurity in BC?' is overlaid in white on the image.

What forms of economic support can the government undertake to reduce household food insecurity in BC?



Insights

Having the Ingredients for our Recommendation

The current solutions are not adequate



Meet Manisha

“As a student, we worry about our assignments, and I just want to give my 100%, but it's **very hard to survive** here.”

Source: [CBC News](#)

Economic Factors

Pain Point 1 = Priorities

- Low income and inflation (2%)
- Housing affordability
- 16% of renters spend more than half of their income on rent and utilities
- The lack of economic support has left less for essential like food



Cultural Factors

Pain Point 3 = Cultural Barriers

- Dietary restriction
- Stigma around food insecurity
- The barriers must be considered and broken down for an effective solution



Social Factors

Pain Point 2 = Lack of social support

- Limited access to food programs or food programs not enough –
- Only 22% of British Columbians participate in current school food programs
- Stigma around food insecurity
- These initiatives are not enough



Recommendation

Implementation

Impact

A person with long blonde hair, wearing a grey t-shirt and a green patterned apron, is cooking in a kitchen. They are using a purple brush to apply oil to a black frying pan on a white stovetop. The kitchen has white subway tiles on the wall and various kitchen items in the background. A large glass pitcher is on the counter to the left.

Recommendation

Time to cook a recommendation

Nourishing the minds of tomorrow: The Green Cart

Food is currently being greatly wasted ...

Government Goals

BC Government Critical Food Infrastructure Fund

14-million fund from 2023 to 2026 to support community organizations, including Indigenous organizations and food banks

Key Considerations

- Addressing Infrastructure Limitations
- Data and governance gaps
- Need for paid staff
- Unique Challenges in Rural and Indigenous Communities

10.8%

of those experiencing food insecurity in B.C. are students.

40%

of food is wasted in BC.

28%

of Canada's food waste occurs on farms (\$2.8 billion)



Insights

Recommendation

... Upcycle food and provide to those in need



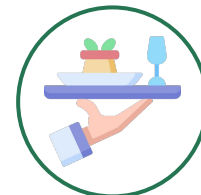
Gather the Ingredients

Collect surplus food from local farms, grocery stores and restaurants
Reduces food waste and supports environmental sustainability.



Cook the Meal

Convert surplus food waste into free meals for students.
Students can better focus on their education, contributing to long-term economic growth.



Serve the Customers

Provide these meals via a food truck in underserved areas.
Mobility ensures flexibility, expands reach to more students, and prioritizes those in need.

Implementation

Impact

The Green Cart

Incorporate a **variety of wholesome healthy meal options** depending on the produce received from existing food recovery organizations

Focus on **minimizing waste** by using sustainable packaging, such as **compostable** or **reusable** containers

Paid and volunteer opportunities for individuals with **food safety** certificates to prepare and distribute these meals



Serve meals **three times a week**, estimated **200 meals a day**

Meals and fresh produce sourced **from leftover food from local restaurants, grocery stores and farms** and made in **commissary kitchens**

Providing **"imperfect"** and **"ugly"** produce sourced **from local farms and groceries**

How is the Green Cart Unique?

What is already being done?



- Existing breakfast and meal plan initiatives across Canada
- Serve students K-12 with meals or snacks at little or no cost
- Partnerships with over 340+ organizations and 140 endorsers
- Mobile food bank delivery

Insights


Recommendation

What VALUE we add



THEGREENCART

- Combines these ideas!
- Adaptable Solution
- Reuse of produce
- Cater toward students of ALL ages
- Make it FREE

Implementation

Impact

A chef in a blue shirt and apron is holding a stack of brown paper food containers and a coffee cup. The background shows a kitchen environment with other people, including one wearing a face mask. A semi-transparent dark grey box is overlaid on the image, containing the text.

Implementation

Delivering our Meal

Preparing the ingredients

Goal

Feeding 145,000 children

Plan

Establish Partnerships

Execute



Local Farms



Local Restaurants

Benefits

- The produce would be thrown out anyway
- These locations can get recognition for their contributions
- Supports a great cause

Monitor

Insights

Recommendation


Implementation

Impact

Preparing the ingredients



Insights

Recommendation


Implementation

Impact

Preparing the ingredients

Goal

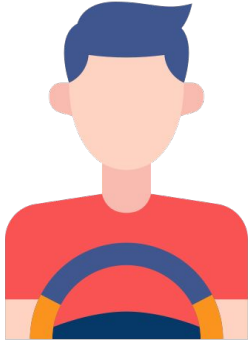
Feeding 145,000 children

Plan



Meet Operational Needs

Execute



Monitor

Order 1 Food Truck

Hire 1 Drivers

Hire 1 Cook

Insights

Recommendation

 **Implementation**

Impact

Preparing the ingredients

Goal

Feeding 145,000 children

Plan

Gather Volunteers

Execute



Monitor

Prepare Marketing Campaign

Leverage Social Media (Instagram)

Mainly students and those who already volunteer at other food banks

Insights

Recommendation



Implementation

Impact

Preparing the ingredients

Goal

Feeding 145,000 children

Plan

Equip Volunteers

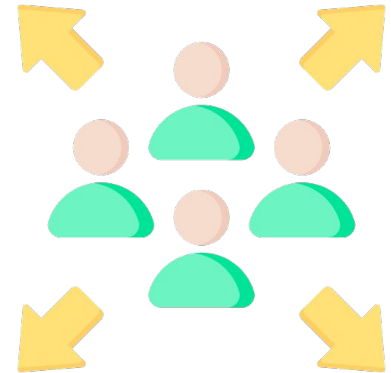
Execute



Launch Marketing Campaign



Train Volunteers



Deploy Volunteers Throughout Operations

Monitor

Insights

Recommendation



Implementation

Impact

Cooking the meal

Goal

Feeding 145,000 children

Plan

Launch and Scale Operations

Execute



Monitor

Pilot launch in Vancouver

Fully launch and scale operations as needed, guided by KPIs

Insights

Recommendation



Implementation

Impact

Serve the people

Goal

Feeding 145,000 children

Plan

Execute

Monitor

KPIs

of people served

Reduction in waste

Volunteer Engagement

Milestones

15,000 people

10,000 pounds

500 hours of volunteer hours

Impact

Advance sustainability by reducing waste, engaging the community, and providing educational opportunities

Insights

Recommendation



Implementation

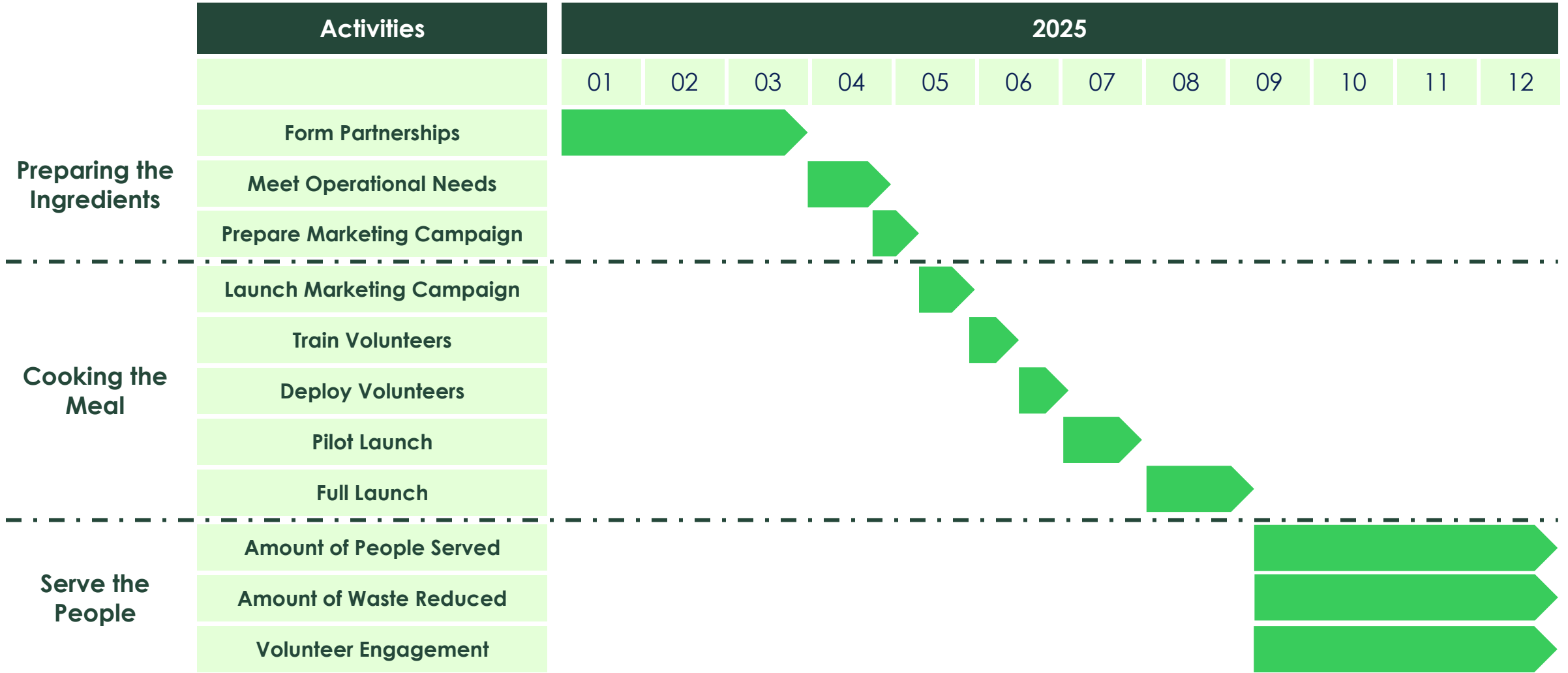
Impact

A warm, intimate scene of a family of three in a kitchen. A woman with long blonde hair is smiling and holding a lit candle. A man with a beard is focused on serving a large roasted bird on a platter. A young girl with long hair is looking on. The table is set with plates of food, a glass of red wine, and several lit candles. The background shows a kitchen counter with a coffee machine and a vase with dried flowers.

Impact

Serving the Meal

The meal start to finish



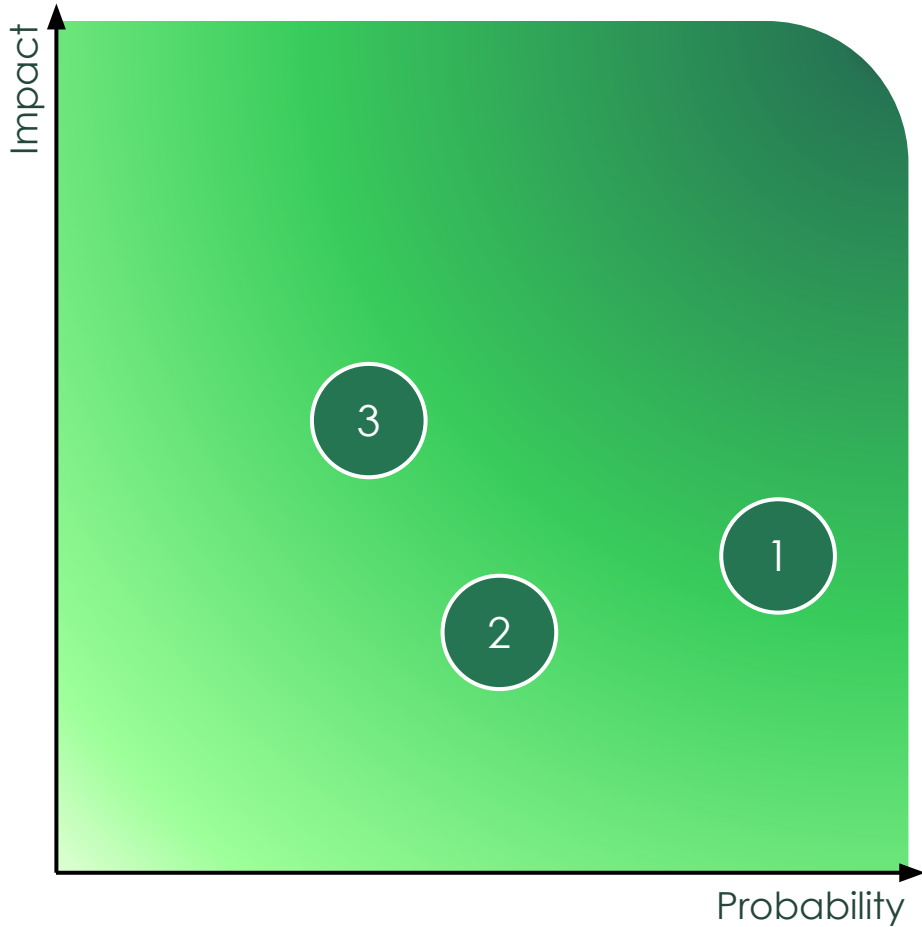
Insights

Recommendation

Implementation

Impact 

What to do if spoilages occur?



Risk

- 1 Volunteer and Staff shortages
- 2 Challenges in assessing impact and efficiency due to the absence of standardized metrics and governance
- 3 Challenges in sourcing surplus or imperfect produce due to supply fluctuations.

Mitigation

- Provide paid roles and incentivize volunteers with perks like skill certifications (e.g., food safety training).
- Establish a central platform to track meals, produce, and volunteers for transparency and better decisions.
- Build diverse partnerships with farms, restaurants, and grocery stores for stable supply.

Finding a Cost-Effective solution to Solve The Issue



14 million
government fundings
to Support the initiative



\$415,088
Total cost to support
this project in 2025



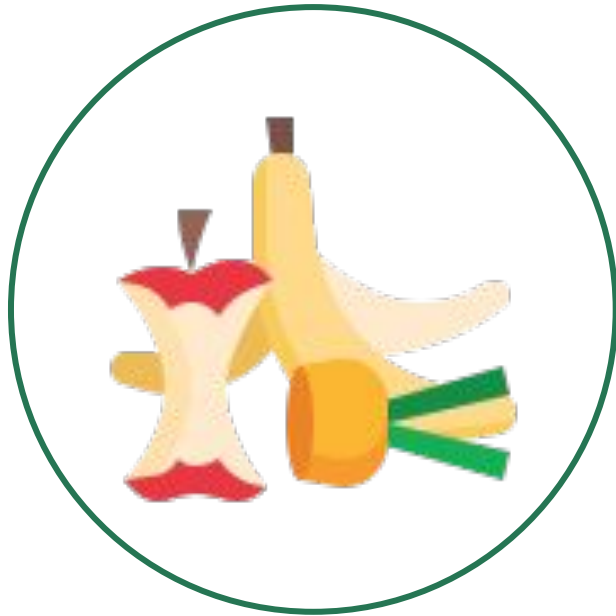
21%
Reduced cost for
food-insecurity
individuals on health
care

Impact

- Lower greenhouse gas emissions and environmental mitigation costs
- Food Insecurity individuals are more likely to have higher expenditures in health care
- Education from the initiative can decrease the future food waste

As the government has a budget of 14 million for subsidies specifically targeting food insecurity issues in BC, half a million is a reasonable amount for CHEF Consulting to acquire.

"The Green Cart" Drives Up the Impact



Over 60%

Of all food wastes per year
can be avoided



28.4%

of all children in BC will be
benefited with less concerns
about food insecurity



More than 15,000

students at all ages are fed
Per month

IN THE NEXT YEAR (2025)

An overhead view of a group of people sitting around a long wooden table in a restaurant or cafe. The table is set with several white plates of food, including pasta, salads, and bread. There are also bowls of fresh produce like avocados and tomatoes, and several glasses of drinks. The people are engaged in conversation and eating. The text "Cooked Up A Storm" is overlaid in the center of the image.

Cooked Up A Storm

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Breakfast Meal Options

Breakfast is the most important meal of the day b/c it replenishes your glucose levels from the night before and refuels your energy levels for the day

-> Important for children because they need energy to learn and play!

Breakfast (3 options):

- **Option 1:** low-fat yogurt w/ strawberries and granola & berry-blended smoothies
- **Option 2:** whole-wheat bread sandwiches w/ eggs and romaine lettuce & fruit bowl
- **Option 3:** bao buns (packed w/ meat & veggies) & small milk cartons



Option 1



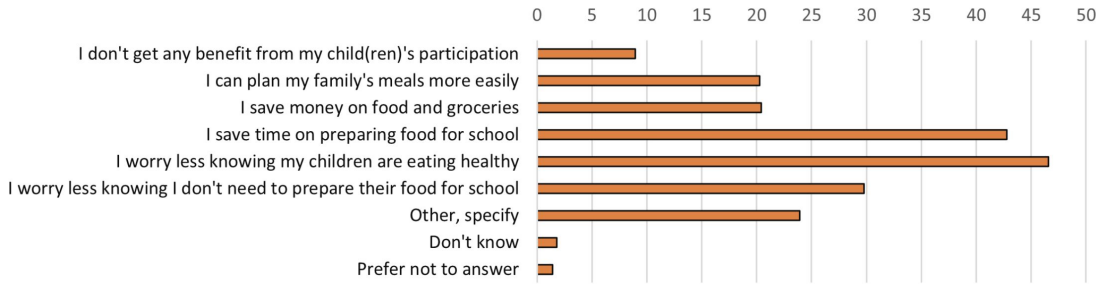
Option 2



Option 3

Current issues with the food system

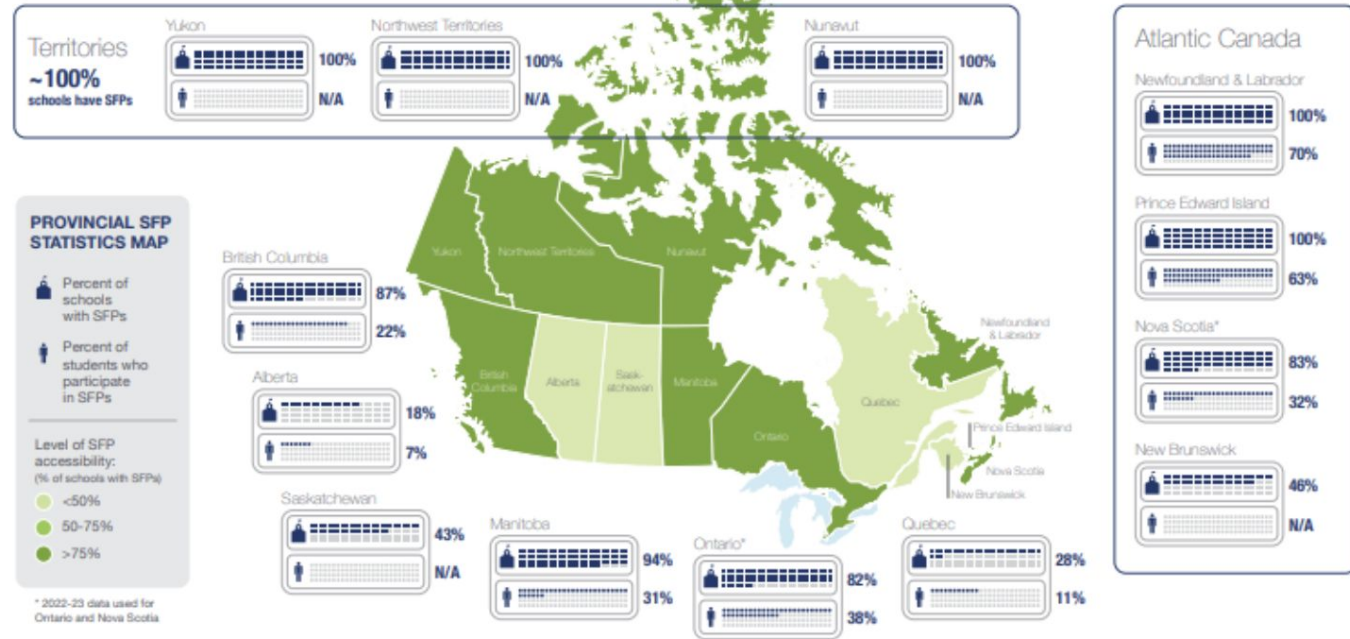
% of respondents agreeing with each benefit of their child's school food program participation



■ Has at least 1 child <18 participating in school food program

SCHOOL FOOD PROGRAMS IN 2023/24

School food programs (SFPs) have operated for decades in Canada, but access varies across the country. In April 2024, the Government of Canada announced a National School Food Program, with a \$1 billion investment over five years to provide meals to an additional 400,000 children annually. Although this falls short of program for all JK–Grade 12 students, the federal and new provincial and territorial investments move Canada closer to achieving a universal program.



THE ARRELL FAMILY FOUNDATION

WHAT'S NEXT?

The Government of Canada aims to finalize agreements with all provinces and territories by the end of the first year of the program in 2024-25. Agriculture and Agrifood Canada is also supporting not-for-profit organizations to invest in infrastructure and equipment to support SFPs through the \$20.2 million School Food Infrastructure Fund. Going forward, sustained long-term commitments are needed to achieve a universal SFP for all students, and expand the number of meals served.

Current School Food Distribution Challenges (according to Canada's National School Food Report)



Infrastructure Limitations

- Inadequate kitchen and storage facilities hinder program expansion
- Non-food funding limits restrict necessary investments in equipment, reusable goods, and food waste management



Need for Paid Staff

- Heavy reliance on volunteers increases burnout and pressure on school staff
- Hiring challenges due to restricted funding and unpredictable voluntary contributions

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Data and Governance Gaps

- Lack of standardized metrics and reporting tools hampers impact measurement and decision-making
- Limited information-sharing mechanisms reduce efficiency and innovation across programs

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Unique Challenges in Rural and Indigenous Communities

- Higher costs for food and transportation, limited access to fresh produce, and inadequate infrastructure
- The need for cultural inclusion, traditional foods, and community-driven program development

Cost Analysis

Cost Analysis			
(\$ in CAD)			2025
Vehicle Acquisition			\$ 125,000.00
Fuel Cost			\$ 70,000.00
Restaurants/Local Farms Purchase			\$ 80,000.00
Salaries			\$ 111,088.00
Commissary Kitchen			\$ 12,000.00
Maintainence Cost			\$ 15,000.00
Misscelenous Cost			\$ 2,000.00
Total Cost			\$415,088.00



Cost Breakdown

Vehicle Acquisition: A brand-new food truck with internal facilities such as fridges would cost around \$125,000

Fuel Cost: A typical truck would cost around \$70,000 annually for fuels in Canada

Restaurants/Local Farms: We projected that the annual cost on purchasing food ingredients from restaurants and local farms are around \$80,000

Salaries: An annual salary for a truck driver in BC is \$54,286 and the annual salary for a chef is \$56,802 in BC

Commissary Kitchen: Rent of a commissary kitchen in Vancouver is \$1,000 per month, which is \$12,000 per year

Maintenance Cost: An average truck maintenance cost in BC is around \$15,000

Miscellaneous Cost: Any extra cost or emergency cost

