

# Solutions to Choosing Locations to Build New Food Hubs

Team 10:

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## Where? Why?

Let's say we have limited resources so we can only choose 10 cities in B.C. to build Food Hubs.

What decision making model should we use? And what factors should we take into account?

- Easy access to all types of food sources (Relatively clear)
- Easy access to the people in need (**Tricky**)

# How to calculate unfulfilled demand?

- 211BC calls? – Sample tends to cover not so many people
- Demographic statistics? – Are people with these traits really in need?

These data are useful but limited. Besides:

**Unfulfilled Demand = Total Demand - Fulfilled Demand**

Fulfilled Demand are those food demand that have been satisfied by existing food hubs, charities and so on.

Calculate unfulfilled demands?

How about we use less prediction and more data we can collect in the real world?

That's why we want to build this **Food Request Platform**.

## Food Request Platform

Current food hubs' location are primarily a result of our community partner agencies and the assessed need in the community we serve.

This platform can utilise the network of existing food hubs and community partners! That's great!

# Partners request food through this platform

localhost:3000/food-request/request

United Way  
British Columbia

Home Search Request

Partner Name

Contact Email

City

Postcode

Urgent Level

Food kg

Submit

# Offer statistics based on cities in B.C. and track every food request

United Way  
British Columbia

Home

Search

Request

City

Search

Area	Beef	Diary	Egg	Fruitnut	Vegetable	Mushroom	Pork	Chicken	Other-poultry
Vancouver	159	6	24	4					
Burnaby	237	9	37	4.3					

## Do not rush into decisions

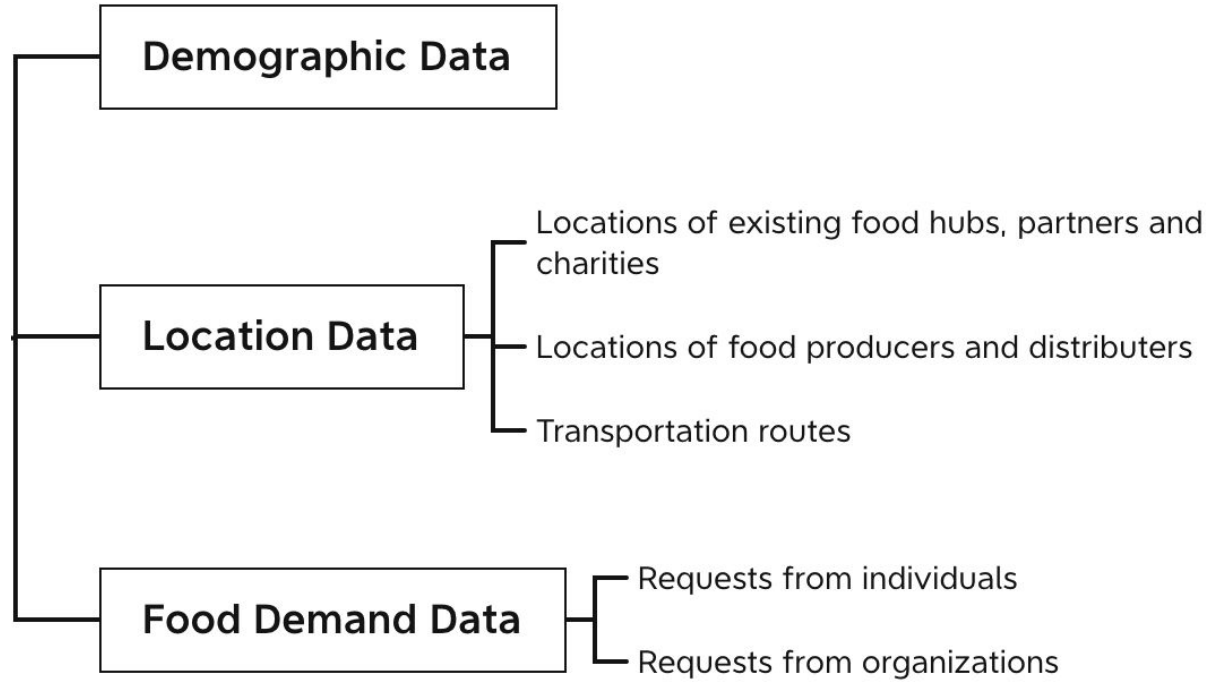
Instead of rushing into building new Food Hubs which may lead to waste of time and money, we can run this platform for a period of time to collect data of unfulfilled demands and satisfy them.



# Food Hub Location Decision Support System

- Food Request Platform for food demand collection
- Evaluation of the necessity of building new food hubs for cities in British Columbia and sort out the priorities.

# Data source



## Future improvements

- Optimization of the decision-making model
- Data visualization

Thank you for listening!

## Background & Goal:

### **Background:**

Current food hubs' location are primarily a result of our community partner agencies and the assessed need in the community we serve.

**Goal:** to choose 10 cities to build food hub using a decision making model based on following data source: