



Food Security Research Network
in and for the North

CONTEST

NWO FoodEx: Designing a food distribution system for Northwestern Ontario

GRAND PRIZE: \$1000

1st place: \$500

2nd place: \$250



JOIN OUR **f** GROUP

Visit: <https://www.facebook.com/groups/nwofoodex>

Website: www.foodinnovation.ca

There is a demand for healthy local food.

It keeps us healthier. It keeps us happier. It supports our local economy.

Northern Ontario is beginning to produce and process a lot of local food, which is great! BUT...

We need a more EFFECTIVE and EFFICIENT regional food distribution system!

This would allow the farmers and food processors to spend more time growing and making food instead of driving it around to various farmers markets and to other regional communities. And neighbouring communities could also benefit from the food produced nearby.

THE CONTEST

What is the challenge? To design a better regional food distribution system for locally produced and processed foods in Northwestern Ontario.

Who is eligible? High school students, college and university students and anyone else who wants to take on the challenge.

When is the deadline? Submissions by **MAY 15th 2014**. Judging will be early June 2014.



QUESTIONS? Contact: 807-346-7954 or info@foodinnovation.ca or through FoodEx FB group

Challenge Overview

WHAT DO WE WANT THIS SYSTEM TO DO?

We are looking for a comprehensive design for an effective and efficient food distribution system for Northwestern Ontario (NWO). This system would include various components (e.g., transportation, weight and perishability of food, receptor capacity of the recipient community, etc.) of distributing food. See further information about Context Variables.

Detailed Description and Requirements

WHAT IS THE PROBLEM? WHY IS THIS AN ISSUE?

In our research a number of local food hubs have emerged in NWO and the piece missing is a distribution system. A Specialty Crops report also shows the need to distribute locally grown and processed food not just locally, but regionally, and beyond. A lot of food is now being grown and processed in NWO. To maintain our health, support our local economy, and foster greater sustainability we need to ensure that this food can be distributed in the region. There is a growing demand for healthy local food by consumers.

Northwestern Ontario has a very large land area with many communities dispersed throughout this vast expanse of land. Distribution of locally produced and processed foods to these communities is logistically difficult because of the geographic distances that the food must travel. This affects the affordability, accessibility, and availability of food, especially perishable food, to people living in these communities. Developing a more practical and efficient food distribution system may result in better food security for people in NWO. It would also help to distribute foods that are locally grown and processed in NWO communities and keep the food-based economy within the region.

WHAT TYPES OF COMMUNITIES ARE IN OUR REGION?

NWO has many communities with year-round road access. There are also many fly-in communities with NO road access except for the limited availability of winter ice roads for 6-8 weeks each year. People living in these communities have difficulty accessing regional local foods.

YOUR ROLE AS A POTENTIAL SYSTEM DESIGNER

You will be participating in solving a major issue for the local food movement in Northwestern Ontario.

The food distribution system you design could include communities that (1) have year-round road access, (2) have no year-round road access (fly-in), or (3) a combination of communities with and without road access. A system with both road accessible and fly-in communities would be the most comprehensive.

GEOGRAPHIC SCOPE

Northwestern Ontario – east of Manitoba/Ontario border and north and west of White River.

RESOURCES - MAPS

- Northwestern Ontario: http://en.wikipedia.org/wiki/Northwestern_Ontario
- Northern Ontario Winter Roads Map:
http://www.mndm.gov.on.ca/sites/default/files/northern_ontario_winter_roads_map.pdf
- Ontario First Nations Communities Map:
http://files.ontariogovernment.ca/pictures/firstnations_map.jpg

CONTEXT VARIABLES to be considered when designing the food distribution system:

- **Transportation** – for each, incorporate the cost, time, distance, special equipment requirements, shipment capacity, potential for joint shipments to neighbouring communities
 - Road, all-season and/or winter only – refrigerated van, truck, car
 - Air – private charter or commercial
 - Rail – a few have train access – is this a more cost-effective option to be included as part of the system?
- **Healthy Regional Food**
 - Perishability
 - Weight
 - Other considerations: seasonality, fragility, packaging
- **Receptor Capacity** (infrastructure of the recipient community)
 - Personnel resources
 - Storage – amount of space, type (freezer, refrigerator, uncooled)
 - Transportation within the community
- **Frequency of replenishment**
 - Dependent on population size of community, how much food can be delivered in one combined shipment, etc.
- **Other context variables** that arise during design

Project Criteria

Students can work on this project as individuals or in teams; however prizes will be awarded only to each project.

Your food distribution system solution could include the following:

1. Maps, graphs, tables, written text, or even videos!
2. Description of the proposed solution – references to support your research can be included
3. Lists or tables of the regional food(s), farmers, producers, processors, transportation vehicles/companies that are part of your distribution system
4. Examples or evidence of why your distribution system is more effective, efficient or less costly than the current system

Judging Criteria

- Comprehensiveness (e.g., both types of communities)
- Originality
- Creativity
- Clearly presented
- Workable solution
- Ease of implementation

*No prize awarded if the judges deem that the criteria has not been met by the project.

IMPACT

The Food Security Research Network will strive to assist in developing the winning entry as a social entrepreneurial opportunity in Northwestern Ontario. Perhaps one of our youth will even consider the actual implementation of this NWO FoodEx as a beginning career opportunity. Let the process begin and we will see what emerges!