EXECUTIVE SUMMARY

Food Flows in Metro Vancouver

HIGHLIGHTS

- Metro Vancouver is the food distribution hub for BC. 78% of the provincial food supply flows to, from, through or within the region.
- Of the total food flows, 83% are offshore exports of grains, oil seeds, and legumes.
- 34% of the BC food supply is sourced from within the Province.
- 14% of the food produced in Metro Vancouver is consumed within the region.
- Metro Vancouver and BC are self-sufficient in the supply managed commodities (dairy, poultry and eggs), but are very dependent on the US and other countries for fruits and vegetables.

The Food Flows in Metro Vancouver study estimates the volume and value of food imported and exported from the Metro Vancouver region and the methods used to transport this food to and from international sources, the US, other provinces and within BC.

The magnitude of food flows is influenced by the region’s location and transportation infrastructure. In general, transportation costs increase with distance, so closer sources of supply are preferred. The routing of food flows is also dependent on the efficiency and capacity of transportation infrastructure. Trucks dominate the food supply chain in Metro Vancouver because they offer a flexible mode of transportation.
Metro Vancouver Food Flows refers to the movement of food across regional district boundaries. The study estimates the food supply, which is based on the amount of food consumed in Metro Vancouver and BC, as well as the amount of food that travels through the region on route to other destinations. The analysis of flows concentrates on the stages of the food supply chain from farm production to wholesale distribution, and does not include last mile deliveries to the point of consumption.

The total annual food flows was approximately 33.7 million tonnes of agricultural products (mostly cereal grains, oil seeds and legumes) worth $32 billion in 2018. Of the total volume, 83% is offshore (mostly cereal grains, oil seeds and legumes) worth approximately 33.7 million tonnes of agricultural products.

Highway and Aldergrove border crossings accounted for 84% of BC’s food imports from the US and 70% of BC’s food exports to the US (by value). Food imports through the port container terminals in Metro Vancouver are mostly destined for outside of BC. Virtually all international food air cargo in BC (less than 0.1% of the total food flows) passes though the Vancouver International Airport.

Food that travels through the region and includes food consumed in Metro Vancouver plus the rest of BC. The BC food supply is sourced from international imports (39%), other provinces (26%) and from within BC (34%).

**Imports**

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<th>Category</th>
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<th>Within Metro Vancouver</th>
<th>US Exports</th>
<th>Offshore Exports</th>
<th>Canada Exports</th>
<th>BC Exports</th>
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**Exports**

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**Rice**

Rice is imported from offshore countries (75% or 92,927 tonnes) and from the US (31,436 tonnes) making Metro Vancouver a major gateway for rice.

**Seafood**

Metro Vancouver generates a surplus of seafood products as most seafood is processed in the Lower Mainland (81%). In 2018, commercial harvest landings totalled 196,300 tonnes and aquaculture totalled 98,000 tonnes.

**Poultry**

Poultry production is dominated by pasture poultry located in Metro Vancouver or the Fraser Valley.

**Cow’s Milk**

BC produces 80% of fluid milk but imports 70% of cheese and processed milk. Metro Vancouver (14%) & Fraser Valley (62%) account for 76% of provincial fluid milk supply.

**Vegetables**

60% of the Metro Vancouver food supply originates in Canada. Only 25% of vegetables are sourced within BC. Except for potatoes, BC is highly dependent on international imports of vegetables (83% of vegetables consumed).

**Fruit**

BC is highly dependent on international imports of fruit (79% of consumption). BC exports blueberries, cranberries and cherries.

**The BC Food Supply**

The total annual BC food supply (based on consumption) is 4.8 million tonnes and includes food consumed in Metro Vancouver plus the rest of BC. The BC food supply is sourced from international imports (39%), other provinces (26%) and from within BC (34%).
FOOD SECURITY AND RESILIENCE

For residents of Metro Vancouver and the rest of BC, food security and resilience depends on both local and imported sources of food. The Covid-19 pandemic has revealed that BC food supply chains are generally robust, although challenges emerged from a shortage of workers. In other situations, such as a natural disaster, there may be different outcomes because the food supply relies heavily on a well-functioning transportation system and open borders.

The resiliency of the BC and Metro Vancouver food supply can be strengthened by protecting agricultural land for food production and purchasing more food from local BC farmers and fishers.

ABOUT THIS STUDY

Davies Transportation Consulting Inc. was contracted by Metro Vancouver to undertake the Food Flows in Metro Vancouver (2020) to better understand the region’s role in the food supply chain. Most of the data was obtained from Statistics Canada (2018), while other information had to be calculated based on population or was derived from other sources. Gaps in data on goods movement and transportation flows in Canada required the value of some shipping units to be converted to quantities and vice versa. The results of this study can inform other work related to food distribution, regional planning, goods movement, and emergency management.

FOR MORE INFORMATION
metrovancouver.org
(search ‘Food Flows in Metro Vancouver’)

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