

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

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 en 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 exports that are transported by rail from the Prairies and shipped through the Port of Vancouver.

Metro Vancouver is the primary entry point for food flows to and from the US and offshore sources. The Pacific

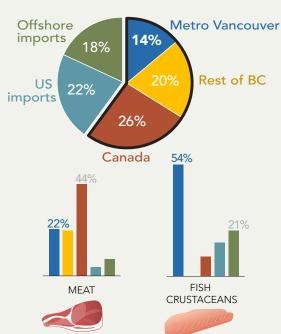


Highway and Aldergrove border crossings accounted for 84% of BC's food imports from the US and 70% of BC's food exports to the US (by value). Food imports through the port container terminals in Metro Vancouver are mostly destined for outside of BC. Virtually all international food air cargo in BC (less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

0.5

THE METRO VANCOUVER FOOD SUPPLY

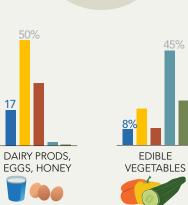
WHERE OUR FOOD ORIGINATES



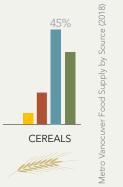
60% of the Metro Vancouver food supply originates in Canada

2.54 million tonnes Estimated amount of food consumed annually in Metro Vancouver*

* based on 53% of the provincial food supply by population







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%).

INTERNATIONAL

ВС

26% CANADA



BC is self-sufficient in poultry products (chicken and turkey); 24% is sourced from Metro Vancouver and 56% from the Fraser Valley.



Honey BC honey production is 1,544 tonnes, while consumption is 7,288 tonnes. Metro Vancouver accounts for 40% of BC production.



54% is sourced inter-provincially and 37% is sourced from within BC.

Milling Products

179,229 tonnes of milling products are consumed in BC, of which 31% is sourced within the Province. Wheat flour accounts for 90% of BC consumption. Most mills are located in Metro Vancouver or the Fraser Valley.

Canada Imports



Rice

Rice is imported from

gateway for rice.

tonnes.

offshore countries (75% or

92,927 tonnes) and from the

US (31,436 tonnes) making

Metro Vancouver is a major

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 aguaculture totalled 98,000

Dairy

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.



Eggs produced in Metro Vancouver and the Fraser Valley totalled 54,000 tonnes or 77% of the total BC production.

Metro Vancouver





Vegetables

Only 25% of vegetables are sourced within BC. Except for potatoes, BC is heavily dependent on international imports of vegetables (63% of vegetables consumed).

68% of BC vegetable production comes from Metro Vancouver and Fraser Valley Regional District (2016).



BC is highly dependent on

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



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')

