BUYING LOCAL FOR UBC FOOD SERVICES

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IN COLLABORATION WITH
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Should UBC Food Services shift up to $500K in annual produce spending towards Vancouver Farmers’ Market Direct?
OVERVIEW

**Background**
- Context
- Literature Review Findings

**Net Benefit Analysis Framework**

**Data Analysis**
- Procurement Strategy
- Saving on CO₂ emissions
- Historical Apple Sales

**Conclusion**
- Recommendations
- Further Considerations
UBC FOOD SERVICES: SCOPE AND MANDATE

- UBCFS provides 85% of on-campus food options, including 2 restaurants and 3 residence dining halls.
- UBCFS has stated in their Food Vision and Values a desire to source more locally-produced, ethical and sustainable foods.
- **Mandate:** To provide a for-profit service to UBC.
CURRENT SITUATION

- UBC Food Services (UBCFS) purchases $2M from FreshPoint
  - $32,000 from Vancouver Farmers’ Market Direct (VFMD)
- VFMD anticipates strong growth
- 25 producers in the Metro Van, Abbotsford, and Okanagan regions
- Many of VFMD products are more expensive
### RESEARCH QUESTIONS

#### Economic

- Is it feasible for UBCFS to shift a major proportion of their produce procurement to VFMD?
  - If so, what is the estimated timeline to reach a $500k partnership?
- How much more are customers willing to pay for locally sourced produce?

#### Environmental

- What will be the change in transport related carbon emissions generated by switching to local produce?
Grebitus et al. (2013): Consumers place additional value on locally-produced goods (unless they have an exotic factor).

- Estimate of 30-40%

- Conflicting evidence as to the overall environmental impact and economic efficiency of local production

- Carbon price of $35 per tonne (Parry, Veung, and Heine, 2014)
NET BENEFIT ANALYSIS FRAMEWORK
FRAMEWORK

Net Benefit to UBCFS + Environmental Impact + Net Benefit to UBCFS Customers = Net Social Benefit
FRAMEWORK: UBC FOOD SERVICES

Net Benefit to UBCFS + Environmental Impact + Net Benefit to UBCFS Customers = Net Social Benefit
IMPLICATIONS OF THE PROCUREMENT SHIFT: UBCFS

UBCFS is a for-profit organization with a commitment to sustainable sourcing.

UBCFS will generate a net benefit if there is no change to profit or if profit increases.

Typical customers are willing to pay up to 30% more for local produce.

Need to renegotiate a contract with FreshPoint and manage a new procurement relationship.

UBCFS cannot increase prices by more than 30% without incurring a loss in sales.

Increased labour and time costs.

Cost Comparison Analysis.
Net Benefit to UBCFS + Environmental Impact + Net Benefit to UBCFS Customers = Net Social Benefit
IMPLICATIONS OF THE PROCUREMENT SHIFT: ENVIRONMENT

CO2 Emissions

Air Pollution

Shipping Method

Ship

Plane

Truck

Shipping Distance

From BC

From California

From Mexico
FRAMEWORK

Net Benefit to UBCFS + Environmental Impact + Net Benefit to UBCFS Customers = Net Social Benefit
IMPLICATIONS OF THE PROCUREMENT SHIFT: UBCFS CUSTOMERS

- Supporting the local economy
- Making environmentally conscious decisions

Higher price of local produce

Benefits vs. Cost
BENEFITS TO UBCFS & COST ANALYSIS
COST ANALYSIS

- We calculated the change in UBCFS’ surplus as the percentage change in costs that UBCFS would incur if it switched to sourcing produce locally from VFMD

- Available Data
  - UBCFS’ velocities and the prices of goods sourced from FreshPoint in October 2017
  - VFMD’s product offerings and current prices

- Assumptions
- Methodology
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<td>PERCENTAGE INCREASE IN COSTS IF SWITCHING ALL AVAILABLE VFMD PRODUCE</td>
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PERCENTAGE CHANGE IN COSTS IF FILTERING BY A 30% COST DIFFERENTIAL

Switching Cost: $(5,602)

% Increase in Cost: -11%
ENVIRONMENTAL IMPACT ANALYSIS
ENVIRONMENTAL IMPACT OF SHIPPING

- Assumed farming locations
  - Mexico City, Mexico
  - Fresno, CA
- Carbon emissions per ton kilometer
  - 16g/ton kilometer by sea
  - 64g/ton kilometer by road
HISTORICAL APPLE SALES ANALYSIS
CURRENT DEMAND FOR DIFFERENT APPLE VARIETIES
Your customers are very sensitive to changes in price

We cannot place a dollar value on the additional customer value for local produce

High variation in price sensitivity for very similar goods
Net Benefit to UBCFS + Environmental Impact + Net Benefit to UBCFS Customers = Net Social Benefit
LIMITATIONS AND FURTHER STUDIES

- An estimate for the value UBCFS consumers place on local produce
- What is the additional value that UBC consumers place on prepared dishes made with a specified portion of local ingredients?
- What are the logistical costs from the decision to source produce from VFMD?
- How do VFMD prices change over the year?
- Implications with FreshPoint contract
VFMD CAPABLE OF MEETING THE INCREASED DEMAND FROM UBC

- **Feasibility**
  - $100,000 for 2019-2020
  - $500,000 by 2022-2023 academic year

- **Client Implication:**
  - Will require an upfront commitment
RECOMMENDATION

- **UBCFS to engage in strategic procurement practices**
- **Client Implications:**
  - Evaluate VFMD prices and offerings on a month to month basis to determine which produce items should be sourced locally for that month
  - Flexibility required in FreshPoint contract
RECOMMENDATION

- **UBCFS to minimize price changes**
  - Will ensure that customer gains are more evenly distributed

- **Client Implications**
  - Additional labour and time costs
  - Price won’t necessarily reflect cost of the good
THANK YOU! QUESTIONS?

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