

The Lakehead Grocery Bus Pilot: Phase II Evaluation and Reflections

Summary

Phase 2 of the Lakehead University Grocery Bus Service was an eight-week pilot initiative to address food insecurity among Lakehead University students by alleviating the barrier posed by lack of transportation to and from grocery outlets. The Grocery Bus Pilot was a collaborative initiative of Meal Exchange's Students Feeding Change (SFC) project, the Thunder Bay and Area Food Strategy (TBAFS), Lakehead University International, the Lakehead University Student Union (LUSU), the Thunder Bay Country Market, Westfort BIA, and the Lakehead University Food Security Committee. The Grocery Bus Service, Pilot Phase 2 operated on four dates during February and March of 2019 and served 33 Lakehead University students, the majority of whom purchased more than 1 week's worth of groceries each trip. Lack of transportation, lack of skills to purchase and/or prepare food, and lack of time were identified by bus riders as barriers to their ability to access fresh, healthy food options. This report can be used by the Lakehead University Food Security Committee to make recommendations regarding the continuation of this service.

Background

Canadian research has demonstrated that a lack of access to transportation can result in increased risk of food insecurity (Perez et al. 2017; Gorton et al. 2010). In 2016, the national charitable organization Meal Exchange launched the Hungry for Knowledge report which found that 39% of post-secondary students across five Canadian campuses experienced food insecurity, with some of the highest rates at Lakehead University in Thunder Bay; nearly 1 in 2 students (46%) had experienced moderate or severe food insecurity (Silverthorn 2016). As the voice of the national student food movement, Meal Exchange works with students, campuses, and community organizations to support fair, just, and resilient campus food systems across Canada. In response to student and stakeholder action on student food insecurity at Lakehead University, and with support from the Maple Leaf Centre for Action on Food Security, Meal Exchange launched the Students Feeding Change project and has been working with local partners to facilitate programs in Thunder Bay with the goal of supporting student food security, access to education, and well-being.

Meal Exchange's Students Feeding Change project held a series of Innovation Lab workshops in the spring of 2018 at Lakehead University. In these workshops, campus and community stakeholders engaged in discussions about the barriers to postsecondary student food security. Transportation emerged during these conversations as a key barrier to Lakehead student food access; in particular, the distance between the Lakehead campus and grocery stores in the Thunder Bay area. In response to stakeholder concerns regarding transportation, Meal Exchange Student Coordinator Jasra Rasmath partnered with the Thunder Bay and Area Food Strategy (TBAFS) in the early stages of the Grocery Bus



Service pilot process, as both groups play a critical role in ensuring access to healthy foods for post-secondary students in Thunder Bay.

The TBAFS's mission is to create a healthy, equitable, and sustainable food system that contributes to the economic, ecological, and social well-being and health of the Thunder Bay area and local First Nation communities. Seven pillars of the Thunder Bay and Area Food Strategy include: Food Access, Forest and Freshwater Foods, Food Infrastructure, Food Procurement, Food Production, School Food Environments and Urban Agriculture. The Grocery Bus Service Pilot project fit well within the Food Access and School Food Environments pillars and was an important initiative in the Thunder Bay Area to support, in order to increase postsecondary student access to food.

Key partners and roles

Victoria Pullia, Intern/Administrative Coordinator at the Thunder Bay and Area Food Strategy

- Marketing and communications, sponsorship, coordination and logistics in-kind support

Sanjana Sharma, Meal Exchange Students Feeding Change Coordinator at Lakehead University

- Coordination and logistics lead, marketing and communications support

Merryn Maynard, Meal Exchange Knowledge Mobilization Manager

- Oversight, administration, and outreach to the Lakehead Food Security Committee

Lakehead University Student Union (LUSU)

- Sponsor, bus service for the pilot

Lakehead University International Students' Centre

- Sponsor, bus service for the pilot

Thunder Bay Country Market

- Sponsor, provided \$2 off coupons to bus riders

Westfort Business Association

- Supporting partner, businesses in the area offered discounts to students for one week of the bus pilot



Summary of Grocery Bus Service Pilot Phase 1

The first phase of the Grocery Bus Service pilot ran for four weeks during the Fall of 2018 and served 45 Lakehead University students in total, who purchased between 1- and 2-weeks' worth of groceries each trip. The majority of students who accessed the bus identified "lack of transportation" as a barrier to their ability to access fresh, healthy food options. The first phase of the Grocery Bus Service Pilot contributed to our learning about how transportation can impact the food security of students in Thunder Bay.

Grocery Bus Pilot Phase 2

Using the feedback received from the first phase of the bus pilot, the project was revisited beginning in January 2019 to run phase 2.

- *Logistics:*
 - Include a third route loop for pickups that could allow students to shop during either the first or second route loop.
 - Operate the bus service between 9 - 5 p.m. on a Friday.
 - A Coordinator should ride on the bus throughout the whole trip to ensure students' questions are answered, no one is left behind, and the bus driver is aware of the route and does not miss stops.
- *Evaluation:*
 - Include a question on the feedback form that queries food security using the 6 items from the Hungry for Knowledge Survey.
 - Include a question on the feedback form that queries what site location the student visited on a specific route date.

Outreach and promotion to the Thunder Bay community during Phase 1 of the bus pilot prompted the Westfort BIA to connect with Farhan Yousaf, V.P Operations & Finance of LUSU in Fall 2018 to organize a unique bus route bringing students from the Lakehead University campus to the Westfort Area. Jessi Ruberto, Senior Development Officer at Thunder Bay Community Economic Development Commission (CEDC) represented the Westfort BIA during the organization of the February 9th route. Thirteen businesses got on board and provided students discounts ranging from 10-15% off. To see a list of participating stores see Appendix A.

Objectives:

1. To increase Lakehead University student access to fresh food options in Thunder Bay
 - a. To assess student demand for transportation support in accessing fresh food options
2. To support Lakehead University student food security



Outputs:

1. Number of students attending
2. Demographics of student riders
3. Which grocery outlets students visit when riding the bus

Outcomes:

1. Students experiencing food insecurity are accessing the service
 - a. Student's food security score, as assessed by students responding whether the following statements were often true, somewhat true, or never true in the last 12 months :
 - i. "I/we worried whether my/our food would run out before I got money to buy more"
 - ii. "The food that I bought just didn't last, and I didn't have money to buy more"
 - iii. "I/we couldn't afford to eat balanced meals"
 - iv. "I/we regularly relied on a few low-cost foods in order to avoid running out of money to buy more food"
 - v. "I/we skipped meals because there wasn't enough money to buy food"
 - vi. "I/we did not eat for a whole day because there wasn't enough money for food"
2. Student riders have improved physical access to groceries
 - a. Student perspective: "As a student at Lakehead University, when it comes to having access to enough healthy food, do you encounter any of the following barriers?"
 - b. Student perspective: "How many days worth of groceries did you purchase/are you planning to purchase during this Lakehead Grocery Bus Service trip?"

Budget

<i>EXPENSES</i>	<i>Project Cost</i>	<i>Sponsor</i>	<i>Contribution</i>
Bus Service (Iron Range)			
February 9	\$332.22	LUSU (Bus sponsorship)	\$996.66
February 22	\$332.22		
March 9	\$332.22	Lakehead International	\$332.22
March 22	\$332.22	(Bus sponsorship, student volunteer hours)	
Printing (Posters, Evaluation Forms, Resource Sheet)	\$250	LUSU Meal Exchange	\$200 \$50
Coordination and Logistics	\$2300	Meal Exchange (Student coordinator, management, 100 hours)	\$1700

		total) Thunder Bay and Area Food Strategy (Coordination and marketing support, 20 hours total)	\$500
TOTAL	\$3878.88		\$3878.88

Evaluation of Pilot Phase 2

Outputs:

1. *Number of student riders:*

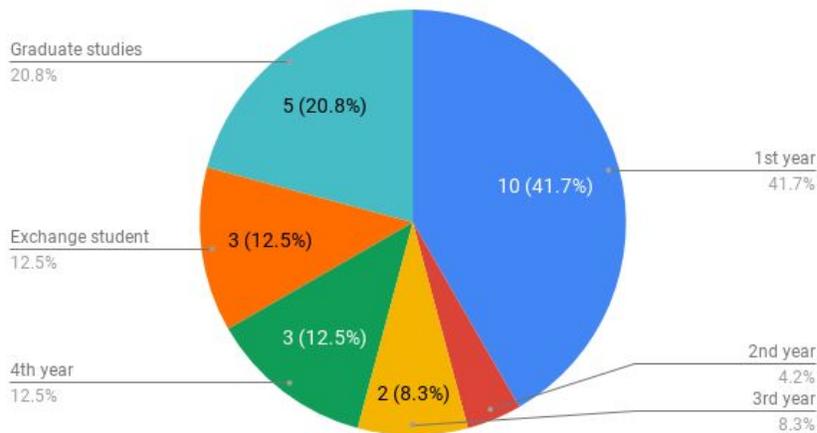
	Fri	Sat	Fri	Sat		Phase 1&2 TOTAL
	Feb 9	Feb 22	Mar 9	Mar 22	Phase 1	
# of students who accessed the service	9	7	5	12	45	78
# of students who attended the budgeting workshops	N/A	4	0	2	N/A	6
# of feedback forms collected	9	5	4	7	21	46

Phase 2 of the Grocery Bus Service saw 33 student riders between February and March 2019, slightly less than the 45 students who accessed the bus in Phase 1. Of these students, 6 visited the budgeting workshops that ran prior to each bus run on Feb 22, Mar 9, and Mar 22.

2. *Demographics of student riders:*

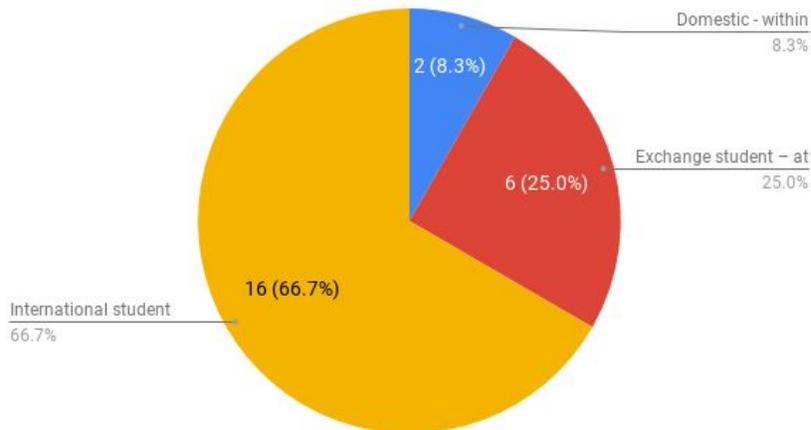


Year of study



The majority (67%) of students accessing the Grocery Bus Service in Phase 2 were undergraduate students. More graduate students (5; 21%) accessed the bus in Phase 2 compared to Phase 1.

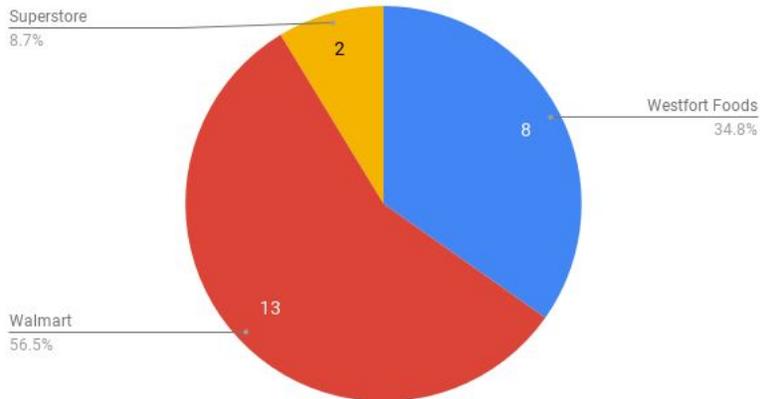
Enrolment status



Similar to Phase 1, the majority of students who rode the bus in Phase 2 self-identified as international students. Only one student reported that they have children; the majority of riders did not have children. The majority (75%) of riders lived on campus.

3. Which grocery outlets students visited when riding the bus

Grocery Outlets Visited

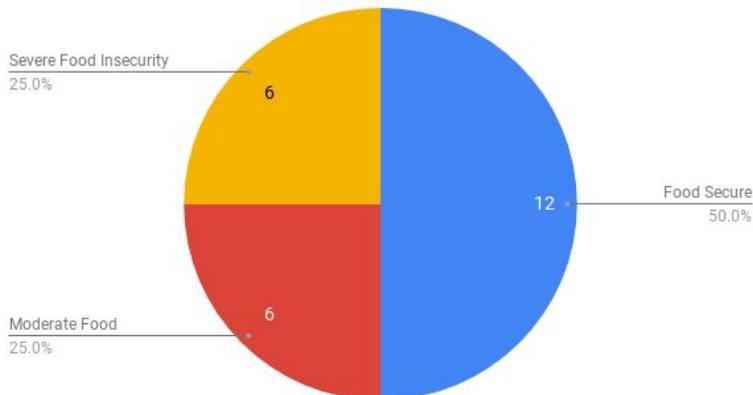


Students predominantly visited Walmart to shop for their groceries, with a minority reporting that they visited the Superstore. On the first bus run that visited the Westfort BIA, a majority of student riders visited Westfort Foods.

Outcomes:

1. *Students experiencing food insecurity are accessing the service*

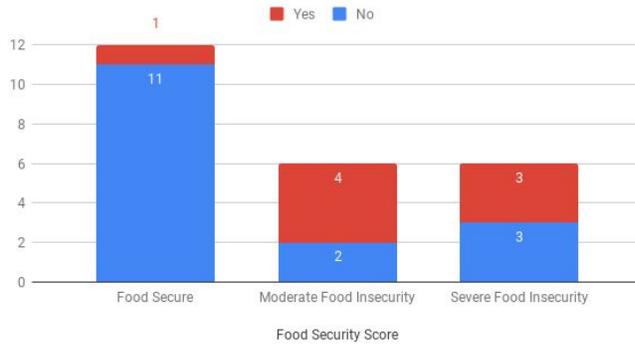
Food security score of student bus riders



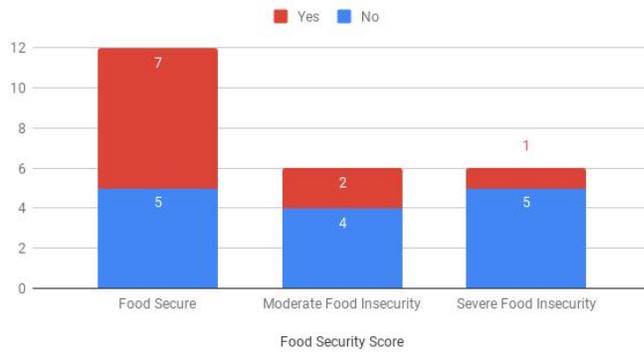
Of the 24 riders who completed a feedback form, 12 (50%) had experienced some degree of food insecurity, with 25% having experienced severe food insecurity sometime in the prior 12 months.

2. *Students have improved physical access to groceries:*

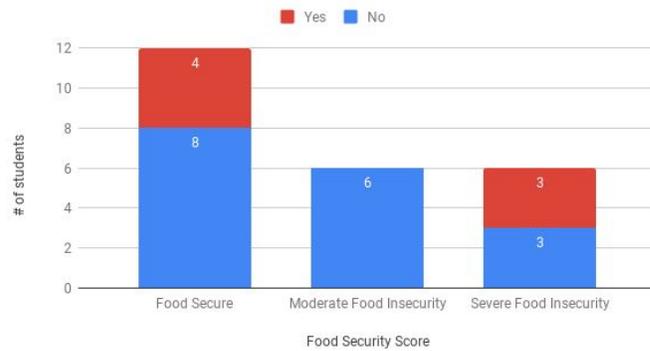
Financial barrier to student food security



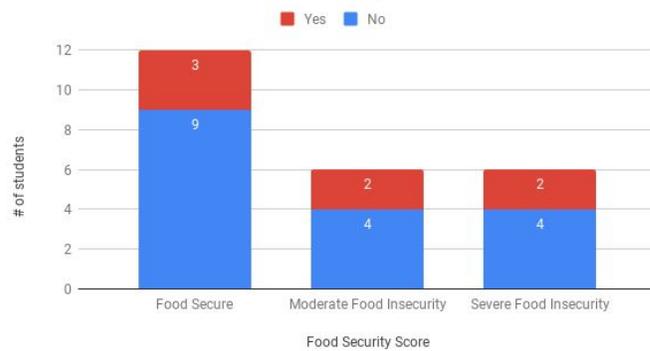
Transportation barrier to student food security



Skill barrier to student food security

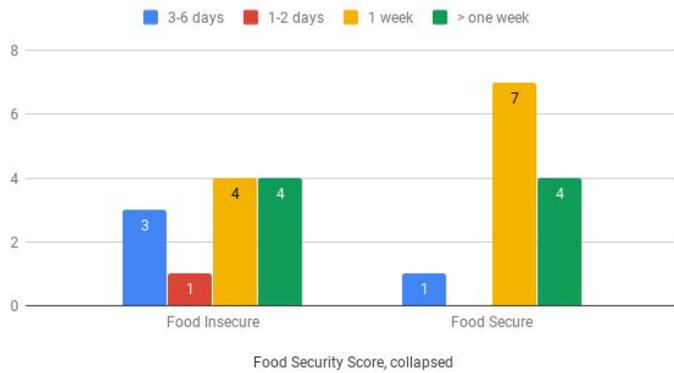


Time barrier to student food security

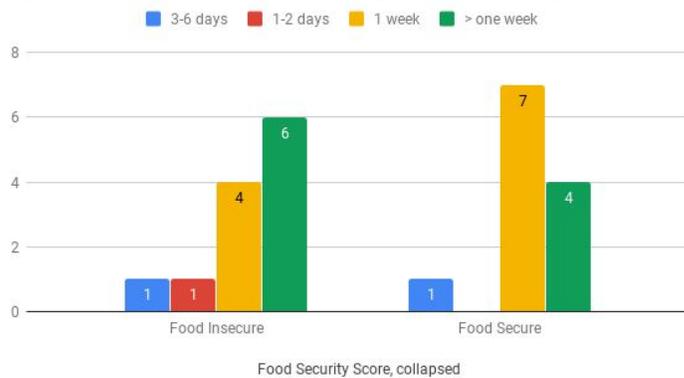


When asked to identify factors that made it challenging to access enough nutritious food, student bus riders who had experienced food insecurity identified that finances and food literacy skills, including purchasing and preparing food, were barriers to their food security. Interestingly, transportation was a barrier for a minority of students who were experiencing food insecurity - only 3 (25%) food-insecure students stated that transportation was a barrier for them. 7 (58%) of food-secure students identified transportation as a barrier to food security.

Days' worth of groceries purchased using Grocery Bus



Days' worth of groceries purchased, without Grocery Bus



Without the grocery bus, a greater number of food-insecure students reported purchasing 1 weeks' worth of groceries at a time, or more. With the grocery bus, food-insecure students reported purchasing fewer days' worth of groceries at a time. The grocery bus did not appear to change the amount of groceries purchased by food-secure students.

Conclusion

The Grocery Bus Service pilot appears to be filling a need among Lakehead students by providing increased access to local grocery stores, and by extension, access to food. The majority of students accessing the service are international students - which may be a reflection of the partnership with Lakehead International that has allowed for increased visibility of the service among this population. Fewer domestic students accessed the bus service compared to international students, and no Indigenous students reported accessing the bus. Most of the students riding the bus were in their first year and lived on campus, indicating that upper-year students who live off campus may find the Service less useful.

Students who have experienced food insecurity in the prior 12 months identified skills and finances as key barriers to food security. It is possible that with the phrasing of the barriers question on the feedback form, food-insecure students who were riding the bus were having their transportation barriers addressed and therefore, did not identify transportation as a barrier to food security. Alternatively, it may be that transportation poses less of a barrier to food security compared to these other factors. Despite the identification of skills as a barrier to food security, only six students accessed the budgeting and healthy eating workshop that was hosted in tandem with the Bus Service runs. In addition, despite offering \$2-off coupons, none of the students who completed feedback forms reported visiting the Thunder Bay Country Market.

The Bus Service builds upon important work that is already making an impact on food access locally. The continuation and expansion of the service could support food access among a variety of vulnerable populations alongside students, including older adults and those living on a low-income in Northwestern Ontario. However, a Bus Service is not able to impact the primary driver of food insecurity; namely, inadequate finances. In addition, the Bus Service is not being accessed by key student groups who are at increased risk for food insecurity; including single parents and Indigenous students. Finally, while food-insecure students are accessing the service, ridership declined over the course of the Pilot Phases. In the interest of designing initiatives that are adequately addressing student food insecurity, student ridership will need to increase to make the Bus Service a reasonable investment of time and money for all parties involved.

Pilot Phase 2: Recommendations

- *Expanded target audience:*
 - Explore connecting with local organizations to expand the Grocery Bus service to serve other populations who may have use of it, including the Student Union of Confederation College Inc. (SUCCI) and community groups connected to the Thunder Bay and Area Food Strategy.
- *Enhanced advertisement/promotion on campus:*
 - The bus service was advertised through Lakehead International, as well as through LUSU. Ramping up advertisement efforts by poster around campus earlier, including the Bus Service on the LUSU website, and disseminating posters through Lakehead faculty to share with their classes may increase student awareness of the Bus Service.
 - Since many of the students accessing the bus were in first year, it would be beneficial to advertise the bus through Lakehead Residence. We suggest connecting with residence assistants to promote the bus to students living in residence and to encourage RAs to organize floor events around the Bus Service dates.
 - Leveraging student engagement at orientation week in the Fall semester may help promote the service, should it be a regular program, to incoming first-year students.



- *Continued partnership with Lakehead International*
 - With the interest in the Bus Service among international students, we recommend continuing to strengthen the partnership with Lakehead International to increase engagement from international students who struggle with transportation to and from grocery outlets in Thunder Bay.
- *Consistent locations*
 - While the partnership with Westfort BIA was advantageous for bringing students to a new area of Thunder Bay that they may not otherwise have accessed, it's addition made advertisement of the Bus Service drop-off/pick-off locations confusing for potential student riders. Students were unsure whether the Bus would be incorporating Westfort into all of it's runs, or just the first run of the season. In the future, if the Bus Service is to become a consistent program, keeping the bus destinations consistent will help students to know where they're going when they ride the bus.
- *Reduce number of loops and number of pick-up/drop-offs*
 - Since students are primarily visiting Walmart, the coordinators suggest removing the Thunder Bay Country Market from the list of pick-up/drop-off locations. This would mean students have more time to visit Superstore and Walmart. Since very few students rode the bus on the 4th loop, we also recommend keeping the Bus runs to 3 or fewer route loops.
- *Continued efforts to enhance food literacy skills among students*
 - Students identified that lack of skills related to shopping for and preparing foods presented a barrier to their food security. Budgeting and healthy eating workshops were run in tandem with the Grocery Bus Service, to attempt to provide a skill-building opportunity for students, but these were not well attended. Conducting targeted research with at-risk groups to determine what types of knowledge they would find useful may help tailor health promotion initiatives to the needs of students.

Appendix A: Participating Westfort Businesses

Black Cat Antiques - 10% Off
 Bulk Zone - 10% Off
 Coney Island - Tax free
 Fresco's Deli - Tax free
 JB Evans - Tax free off regular priced items
 Northern Unique Bakery - 10% Off
 Rollanson's Flowers - 10% Off
 Salween - 10% Off
 The Barbershop - 10% Off



The Sal - 15% Off

Tontu/Enfarrow - 10% Off

Westfort Bar - 10% Off

Westfort Foods - 10% Off

For inquiries on the information in this report or to collaborate, please contact:

Victoria Pullia

Intern/Administrative Coordinator

Thunder Bay and Area Food Strategy

foodstrategyadmin@ecosuperior.org

Merryn Maynard

Knowledge Mobilization Manager

Meal Exchange

merryn@mealexchange.com