



# Michigan Technological University

## Campus Food Accessibility Enhancement Proposal

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### Company Summary:

Michigan Technological University, or Michigan Tech, is a public research university in Houghton, Michigan. It's best known for its strong engineering, technology, and science programs, with a focus on hands-on learning and real-world problem-solving. The university has a reputation for producing highly skilled graduates ready for careers in industry and research. Located in Michigan's Upper Peninsula, the campus offers a tight-knit community and plenty of outdoor activities, making it a unique place to study and live.

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## 1. Introduction

### a. Project Overview

Michigan Tech's current meal plan system presents challenges for students who spend long hours working on campus. While meal swipes and dining dollars provide access to food, the limited number of dining locations that accept swipes makes it difficult for busy students to find convenient meal options. Moreover, many of the locations that do accept swipes are not easily accessible to those who spend most of their day in academic buildings, labs, or offices. This issue is further compounded by the restricted operating hours of certain dining halls.

Since proper nutrition is essential for academic performance and well-being, expanding food accessibility by increasing the number of dining locations that accept meal swipes and extending operating hours will better support students who rely on campus dining throughout the day.

### b. The Current Situation

Currently, students with meal plans have only three dining halls where they can use their swipes, and these locations have limited hours. The table below outlines their operating hours [9]:

Dining Hall	Monday - Friday	Saturday - Sunday
Wadsworth Hall	7:00 AM - 7:30 PM	9:00 AM - 7:30 PM
McNair Hall	7:00 AM - 9:00 PM	11:00 AM - 1:00 PM, 4:00 PM - 6:30 PM
Douglass Houghton Hall	7:00 AM - 1:30 PM	Closed

These locations are also inconvenient for students who spend most of their day working on campus, particularly those in the Rozsa Center or the Mechanical Engineering and Engineering Technology (MEEM) buildings. As a result, students who rely on meal plans may struggle to access food throughout their busy schedules, making it difficult to stay properly nourished.

### c. The Need

The current meal plan system presents significant challenges in terms of accessibility and convenience. With only three dining halls available for meal swipes and limited operating hours, students often struggle to find time to eat during their busy days. This is especially true for students working in areas far from the dining halls. The restricted hours, particularly at Douglass Houghton Hall, further limit access, leaving students with few options during critical parts of the day. The combination of inconvenient locations and

inflexible hours makes it difficult for many students to maintain proper nutrition, which can have a negative impact on their academic performance, focus, and overall well-being.

#### **d. The Benefits**

Having access to convenient, healthy meals can offer real advantages for college students, both academically and personally. Regularly eating balanced meals gives students the fuel they need to stay focused in class, retain information, and perform better on exams. Over time, nutritious diets, especially those rich in fruits, vegetables, and whole grains, can support immune health, reduce illness, and lower the risk of chronic conditions like heart disease and obesity [7].

Beyond physical health, nutrition also plays a major role in mental wellness. Healthy eating habits are linked to reduced symptoms of anxiety and depression, helping students feel more stable and focused throughout the semester. Studies have even shown that students who eat more fruits and vegetables tend to earn higher GPAs. By making nutritious food more accessible, campuses can support not just student health, but also academic achievement, engagement, and overall success [7].

#### **e. The Limitations**

While these proposed improvements will increase students' access to food on campus, there are inherent limitations that need to be considered. For example, the smaller space available in locations like Fisher Hall and the logistical constraints of food trucks may restrict the variety of meal options. To address this, these facilities could focus on offering a limited selection of filling, nutritious meals rather than an extensive menu. Additionally, while extending operating hours would improve accessibility, providing food on a 24-hour basis is not feasible due to staffing, cost, and demand limitations. However, extending the hours of dining areas and food trucks into the evening could help bridge the current gap in food availability.

## **2. Plan of Action**

### **a. Proposed Improvements**

This proposal focuses on expanding food accessibility on campus through two key initiatives: converting the existing food pantry in Fisher Hall into a dining area and introducing a mobile food truck to serve students throughout the day. These improvements aim to address the limited meal availability in central campus areas and provide students with more flexible dining options.

The Fisher Hall dining area would operate from 7:00 AM to 9:00 PM, significantly extending food access beyond Douglass Houghton Hall's dining facility, which, despite its central location, closes at 1:30 PM. By allowing students to use meal plan swipes, this space would provide a convenient and reliable dining option for those with packed schedules who may otherwise struggle to find meals later in the day. Additionally, Fisher Hall's central location on campus ensures that it remains highly accessible for students moving between academic buildings.

With colleges students being "busier than ever", a mobile food truck would complement this effort by offering quick, on-the-go meal options at various locations around campus, giving students the "flexibility and portability they want" [6]. A weekly schedule would determine its stops, ensuring predictive food availability across campus. This approach would reduce congestion in fixed dining halls and give students an alternative place to get food when transitioning between classes.

Key features of the food truck include:

- A rotating weekly schedule, ensuring coverage across campus.
- Grab-and-go meal options such as sandwiches and wraps that are both nutritious and filling.
- The ability for students to use meal plan swipes increasing the value and flexibility of their dining plans.

This dual approach of a stationary dining area and a mobile food truck would significantly improve food availability on campus, ensuring that students have access to meals even during their busiest of days. By addressing the gaps in current dining services, this proposal offers a cost-effective and practical solution to improve student well-being.

#### **b. Timeline**

The renovation of Fisher Dining Hall is expected to be relatively extensive overhaul. Based on comparable renovation projects, such as the renovation of Schott Dining Hall at John Carroll University, I estimate that this project will require about three to six months to complete [1][6]. This timeline includes demolition, structural changes, appliance installation, and final inspections to bring the facility back online for student use.

Industry sources suggest that launching a food truck can take anywhere from 6 to 16 months [5]. However, with support from the university and a built-in customer base, it's reasonable to expect that a campus food truck could be commissioned and operational within approximately six months.

### c. Cost and Budget

This proposal includes several cost factors associated with the conversion of the Fisher Hall food pantry into a dining area and the implementation of a mobile food truck. Below is a breakdown of the anticipated costs for both initiatives:

Fisher Dining Area Conversion: The cost to convert the existing food pantry into a dining area involves renovations such as kitchen equipment, seating arrangements, and necessary utilities upgrades. Based on industry standards for kitchen conversions, the average cost for converting a space for dining use is about \$150 per square foot [4]. With the Fisher dining area estimated to be 3,500 square feet, the total cost of conversion would amount to approximately \$525,000.

Food Truck: The cost of purchasing a food truck varies based on its size, condition, and customization. A food truck is estimated to cost between \$75,000 and \$150,000. Additionally, operational costs, including staff, maintenance, and supplies, are estimated at \$36,000 per year [2]. These ongoing costs ensure the truck remains functional and ready to serve students on a consistent basis.

Item	Cost Estimate	Description
<b>Fisher Dining Hall</b>		
Renovation	\$525,000	Cost of renovating space for use as a dining area
Operating Costs	\$150,000/year	Cost of utilities and labor
<b>Food Truck</b>		
Purchase of Food Truck	\$75,000-\$150,000	Cost to purchase new or refurbished food truck
Operating Costs	\$86,000/year	Estimated annual cost for staffing, fuel, maintenance, and other operations
<b>Total Cost</b>	<b>\$1,780,000 - \$1,855,000</b>	<b>Total project and operating costs for 5 years</b>

These costs are an initial estimate based on similar projects and industry standards. Additional expenses may arise depending on specific site conditions or unforeseen renovation needs. However, this budget provides a solid foundation for moving forward with both initiatives.

#### **d. Feasibility**

Many students have expressed frustration over limited access to food on campus, highlighting the difficulty of finding convenient and affordable dining options within the current meal plan system. The proposed renovation of Fisher Hall into a dining area and the introduction of a mobile food truck present practical solutions to these concerns. Both initiatives have the potential to significantly improve food accessibility, addressing the needs of students with busy schedules and limited options.

Although the financial investment required for these improvements is substantial, the documented benefits of increased food access, including improved student health, mental well-being, and academic performance, justify the expense. Challenges such as staffing, space limitations, and logistical coordination will need to be addressed, but the overall approach is feasible and aligned with the goals of enhancing student life and the on-campus experience.

#### **e. Anticipated Objections**

Potential objections to this proposal include high implementation costs and the risk of underutilization. Some may argue that the estimated cost of \$1.11 million to \$1.185 million is too high for the university, especially given other competing budget priorities. Additionally, there is concern that the Fisher dining area or food truck might not be used as expected, resulting in a wasted investment. However, these challenges can be mitigated through a trial period for both the food truck and dining area, allowing the university to assess student demand before fully committing. This approach provides an opportunity to adjust the project as needed. Moreover, the long-term benefits of improving student access to food, enhancing well-being and academic performance, will far outweigh the initial costs, making the investment a valuable and worthwhile endeavor.

### **3. Conclusion**

#### **a. Summary**

Michigan Tech's current meal plan system presents challenges for students, including limited dining locations, restrictive meal swipe options, and inconvenient hours. To improve food accessibility, this proposal recommends converting the Fisher Hall food pantry into a dining area and introducing a mobile food truck. These initiatives offer cost-effective solutions that enhance flexibility, ensuring students can access nutritious meals throughout their busy schedules. The estimated cost for these improvements ranges from \$1.11

million to \$1.185 million over the course of a decade, covering renovation, equipment, and operational expenses. Given the well-documented benefits of increased food access on student well-being and academic success, this investment is both justified and necessary.

**b. Call to Action**

To ensure the success of this proposal and better serve our student body, it is essential that we take the next step in expanding food accessibility on campus. By moving forward with the trial period for the Fisher dining area and the food truck, we can assess demand, refine the implementation, and ultimately provide a much-needed solution to the current food access challenges. Let's prioritize student well-being and academic success by committing to this project and investing in a more convenient and accessible dining experience. Together, we can create a campus environment that supports the diverse needs of all students.



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