

Understanding Upper Peninsula SNAP Usage

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Introduction

5,630 people in Houghton County, about 15% of the population (Feeding America), experience food insecurity, “a household-level economic and social condition of limited or uncertain access to adequate food” (USDA 2025b). This number is roughly equal to the number of undergraduate students at MTU (“Facts and Figures”). Food insecurity is heavily correlated with poverty or otherwise low income (Wight et. al., 2014).

Food insecurity has been shown to have serious adverse effects at all stages of life. Being food insecure as an adolescent is estimated to drop cumulative GPA by .4 (Shanafelt et. al, 2016). Similarly, food-insecure college students are twice as likely to have a GPA under 3.0 when compared to food-secure college students (El Zein et. al., 2019). A systematic review of research finds that food insecurity inhibits planning capabilities, problem-solving, and emotional regulation (Royer et. al., 2021). Childhood food insecurity is the basis of one of ten Adverse Childhood Experiences (ACES). The number of ACEs experienced increase the likelihood of later-in-life problems: adults with even 1 ACE are 80% more likely to attempt suicide, 30% more likely to inject drugs, and 100% more likely to consider themselves an alcoholic (CAHMI).

The Supplemental Nutrition Assistance Program (SNAP, colloquially called “food stamps”) is meant to address food insecurity. However, Lu and Carter found that in the western UP “food program use does not reduce food insecurity probability” (2024). This concerning finding highlights the existence of barriers to food security in the rural UP beyond simply SNAP enrollment. I will build upon this survey by investigating UP residents' experience of food insecurity.

Objective

There are two main goals of this research. The first goal is to describe the experience of UP SNAP recipients using their benefits. The second goal is to provide a generalized account of SNAP recipients to better illustrate what they need from the program.

Background

Lu and Carter found that respondents reporting a lack of time are more likely to be food insecure even when controlling for the respondent’s economic situation (2024). I expect the reported lack of time to be a compounded problem. There are only 24 hours in a day, and many rural residents will have long commutes and long drives to grocery stores. Figure 1 is a map from the US Department of Agriculture, highlighting areas that are both low income and have low access to supermarkets. The green overlay in Figure 1 represents areas that are low-income and at least 10 miles from the nearest supermarket, and the yellow overlay represents areas that are

low-income and at least 20 miles from the nearest supermarket. While residents may have closer local grocery stores, prices are typically significantly higher than at a supermarket like Walmart.

I believe the lack of time may also be compounded by limited ways to maximize time. Crockpots allow people to set up the slow cooker while they are off at work, but a slow cooker runs around \$40. To a population defined by a lack of money and low wages, \$40 can be a half day's work (assuming ~\$14/hr) or more—without factoring in other purchases necessary for meal prep.

These possible explanations are currently unexplored. Lu and Carter show a lack of time correlates with food insecurity (2024). Without an understanding of how the lack of time manifests itself, steps cannot be taken to mitigate the issue.

Methods

I will conduct a series of interviews with self-identified SNAP recipients. Questions will be centered around two main research questions. The first research question is “What difficulties do UP SNAP recipients face in using their benefits?” This research question intends to provide the same lens as a usability test, with derived questions examining the program as it exists.

The second research question is “What are the unique concerns of food insecure UP residents?” This research question intends to illustrate the broader food-related needs of UP residents. Derived questions will seek to create a generalized account of food-insecure UP residents which should help illustrate what may or may not aid them.

I will also conduct a singular contextual inquiry with a willing SNAP recipient—accompanying them for (part of) their grocery run and asking them about their experience. This provides the opportunity for behavioral observation, and the recipient may find it easier to answer questions in the relevant environment.

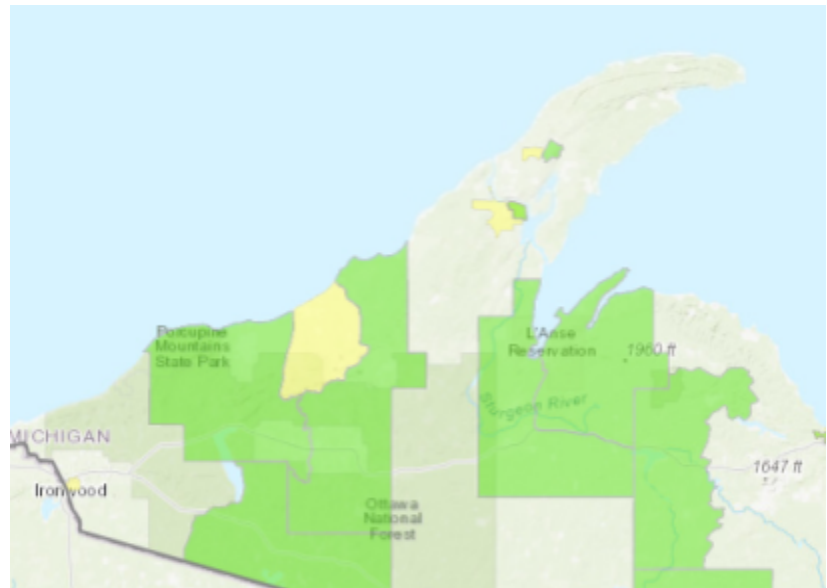


Figure 1. A map of the western UP. Colored overlays represent distance from the nearest supermarket (USDA, 2025a).

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