Green Fund Award #: 100221

Title: A Spatial Analysis of Dining Hall Food Item Origins and Producers

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Overview

The primary goal of this project was to identify food producers and distributors within the state of Illinois and within a 250 mile radius of Carbondale, Il. from whom University Housing Dining could purchase food. The purpose of developing a local foods database was to provide University Housing with the information needed to make better informed purchasing decisions and, thereby, increase the sustainability of student meals. To do this, state and regional food databases were consulted and local farmers and state-local food cooperatives were contacted. In total, 412 local and state food producers were identified.

Approach

It was first necessary to create a target area for examination. The entire state of Illinois was examined as per HB3990 (Illinois Food, Farms, and Jobs Act) stipulations, which established that 20% of institutional food purchases must come from within the state of Illinois by 2020. Next, a 250 mile radius from Carbondale was examined to identify a "local" target area (Figure 1). Primary data sources included ThomasNet.com, a national online food database used primarily by those in the food industry, and LocalHarvest.com a database listing farmers within the state of Illinois. The works of previous SIUC food studies were also consulted, including a report by Megan Baskerville (SIUC Geography Department) and Ryan Babchuck (SIUC alum).

Other producers and farms were found by consulting local food advocates within Carbondale including Lynn Waters, the Carbondale Neighborhood Food Cooperative, and Carbondale Food Works (specifically, Jerry Bradley and Dana Carver).

Limitations

Throughout the course of this project, some limitations and challenges presented themselves. The largest limitation throughout was evaluating whether or not a producer within the target areas was applicable to University Housing Dining Purchases. Some major food product producers within the region and state did not offer products required by SIUC purchasers. At other times, producers or farmers were unable or unwilling to sell through a food purchasing unit such as US Foods, which is used by SIUC University Housing Dining. Finally, some farms and businesses listed on various databases consulted were no longer in operation. To overcome these three limitations, each farmer or food producer was contacted directly, though some were unable to be contacted. The intent was to achieve the most detailed and accurate information possible. Although this was also the most time-consuming portion of the project, it was vital to develop a spreadsheet tailored to the needs of SIUC Dining. Furthermore, many valuable contacts were made through this process, and records of those conversations— specifically, date, form of communication and discussion notes—were included within the spreadsheets to be reference at a later date and to prevent unnecessary and inefficient repeats of those contacts.

Finally, many argue that local food options are not feasible for large institutions due to perceived higher costs. However, HB3990 allows state institutions to bid up to 10% higher for foods purchased within the state of Illinois when using a purchasing service (such as U.S. Foods). This provision should help defray any potential budget limitations. This economic analysis, however, was outside the scope of this study.

Results

This study identified 254 available food producers for SIU Dining purchases within a 250 mile radius of Carbondale. An additional 158 food producers are located within the state of Illinois and are available for SIU dining purchases. A copy of the spreadsheets submitted to University Housing is available upon request.

It was found that nearly all fresh or frozen vegetable options in the dining halls could be replaced with local produce or state grown and packaged produce. Local replacements for other staple food items (e.g., foods used daily within the dining halls) were also found, showing an opportunity for year-round and day to day emission reduction for meals within the dining halls.

Sustainability Impacts

The use of certain staple foods items such as potatoes were further analyzed to demonstrate potential sustainability impacts. Currently, SIUC purchases whole potatoes and French-fry style cut potatoes from two main locations, Rigby, Idaho and Aroostook County, Maine. Comparable local producers were found in Charleston, Missouri and St. Anne, Illinois.

Approximately two-hundred and ten pounds of potatoes are served at one meal in Trueblood dining hall. Chopped and frozen potato items, such as French-fries, needed for one meal alone emit 37.87 pounds of carbon dioxide due to road travel from Maine. Whole potatoes travelling from Idaho emit 52.71 pounds of carbon dioxide for one trip. If purchased locally, specifically from Black Gold Potatoes in Charleston, MO, whole potato emissions could be reduced to only 2.23 pounds of carbon dioxide emissions for one meal, a difference of 50.48 pounds of carbon dioxide for that one meal. If whole potatoes were purchased within the state of Illinois, the purchase would comply with HB3990 and support the local economy. This example, though small in scope, shows how foodshed green house gas emissions could be significantly reduced if more local purchases were made.

In summary, several unsustainable business transactions were pinpointed through this systems analysis. By purchasing more local food items, University Dining could reduce their carbon footprint, reduce greenhouse gas emissions, and promote overall campus sustainability. This study could be used for future University Dining sustainability assessments, as well as campus sustainability assessments such as AASHE STARS program.

Education and Outreach

The education and outreach portions of this project are ongoing. Dissemination of findings will take place at the 2010 AASHE conference (October 10-12) as well as through an outreach display in university dining halls during the fall 2010 semester. Ongoing summaries of student research continue to be documented via the student blog, SoIIFoodAdventures.blogspot.com.