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Regional Patterns of Outsourcing in Higher Education Foodservice: Implications for Conscious Consumption

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Abstract

Outsourcing has long been the dominant trend in higher education foodservice. However, in an era of heightened interest in local food provision and regional food economies, little is known about regional patterns in outsourcing. Using foodservice provider and location data from 1,399 institutions across the United States, we analyze and map the distribution of foodservice providers. Additionally, we compare provider structures to regional variability in direct and intermediated sales of local foods. We find distinct regional variability in outsourcing practices, including increased use of self-op and fresh-prep providers in regions with existing regional food infrastructure.

Keywords: outsourcing, foodservice, foodservice provider

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Introduction

Our understanding of the food system as a complex set of relationships that impact production capacity, sustainability, resilience, and human health has matured over the past 20 years (Eakin et al., 2017). The current system is characterized by consolidation and an input/output approach (Lobao and Meyer, 2002) that has maximized the total volume of production, increased caloric output, and diminished global hunger (Tilman et al., 2002). However, increased consolidation and the enhanced use of agricultural inputs have resulted in profound negative impacts to agricultural communities (Lobao and Stofferan, 2008), growing concerns related to malnutrition, the equitable distribution of foods, and the negative environmental impacts of production (Moragues-Faus et al., 2017). The primary alternative to the current system has, for many years, been embodied by the *local food movement*. Conceptually, local foods prioritize the decentralization of agricultural production and distribution while infusing individual relationships and equitable exchange back into the system (Lyson and Guptill, 2004). Despite years of growth in direct-to-consumer sales (Low et al., 2015), an awareness has emerged that to reshape the industrial food system, small farms and local food infrastructure are insufficient (Clancy and Ruhf, 2010). A growing emphasis on "agriculture of the middle" (large independent family farms) (Kirschenmann et al., 2008) and regional (multistate) distribution networks has moved to the forefront of research (Clancy and Ruhf, 2010; Stevenson et al., 2011; Mount, 2012).

Investigation of regional food economies and midscale agriculture has increased interest in the role of intermediated markets. Intermediated markets are defined as local and regional sales that pass through an aggregator, restaurant, grocer, or institution before reaching the consumer (Low and Vogel, 2011). Amongst intermediated markets, institutional buyers (e.g., hospitals, K-12 schools, and higher education), with their multimillion-dollar food budgets and thousands (or millions) of meals served per year, are thought to serve as a lynchpin in regional food economies (Thottathil, 2019). Institutional buyers may provide stability that allows producers to grow into new markets (Friedmann, 2007; Mount, 2012). While a focus on institutional purchasing and the scaling of production reaches back nearly 15 years, there is still a great deal unknown about the actors that occupy the institutional foodservice space.

The college and university foodservice sector, with its approximately $18 billion annual budget (MAFSI, 2017), could be a valuable institutional contributor to regional food systems. Minimal research has focused on foodservice structures within higher education. This work contributes to a developing narrative regarding the role foodservice providers (often third parties contracted by the university) play in higher education food purchasing (Glickman et al., 2007; Barlett, 2017; FINE, 2017; Santo and Fitch, 2018; Henshaw, 2019). The current study explores the composition of the college and university foodservice management landscape. We ask: What percentage of all foodservice at residential colleges and universities is outsourced? Do patterns of geographic variability exist in foodservice outsourcing? And do those patterns provide insight into the potential for local and regional food purchasing at these institutions?

Literature Review

Regional Food Systems and Values-based Food Chains

Even as demand has increased in the local food economy, there is growing awareness that growth in very small farms and direct-marketing opportunities are not addressing a clear gap in the production system (Clancy and Ruhf, 2010; Stevenson et al., 2011). Bifurcated control of distribution channels between small-scale direct-to-consumer sales and highly consolidated "broadline" distributors (e.g., Sysco and US Foods) (Howard, 2016) has only further exacerbated a "hollowing out" of the middle of U.S. agriculture that has been present for decades (Buttel and LaRamee, 1987; Stevenson et al., 2011). A number of "alternative" institutions have emerged to fill the gap left by consolidation. Collectively, this refocusing has become known as "agriculture of the middle" (AOTM) (Kirschenmann et al., 2008; Stevenson et al., 2011). Much of the focus of AOTM research is directed at the need for properly scaled processing and distribution channels that will provide midsized farms a competitive marketplace and allow small farms to scale up production to meet market demands (Mount, 2012; Clark and Inwood, 2016).

Two strategies of growing interest and importance for creating mid-scale infrastructure are food hubs and values-based food chains. Food hubs serve as aggregators and "supply chain managers" of "source identified products from local and regional producers" (Berti and Mulligan, 2016, p. 22). Food hubs allow smaller producers with sub-wholesale quantities of product to access wholesale markets, while not losing their individual identities and direct market premiums (Barham et al,. 2012). Food hubs are embedded in a values-based food chain (Stevenson and Pirog, 2008), which bridge the gap between direct, source-identified and conventional, anonymous marketing channels (Bloom and Hinrichs, 2010). They take advantage of conventional logistics and distribution systems while maintaining a set of core operating values and product identities from farm to market (Bloom and Hinrichs, 2010; Diamond and Barham, 2012). Key to the functioning of a values-based food chain is the securing of buyers who share the system's values or benefit from the differentiated products available in a values-based marketplace (Diamond and Barham, 2012; Thottathil, 2018). These buyers may take a variety of forms, including restaurants that prioritize local ingredients, small "mom-and-pop" retailers with consumers that value source-identified local products, or institutions that identify as "conscious" consumers in an attempt to benefit their local communities (Bloom and Hinrichs, 2010; Thottathil, 2018).

Institutional Buyers as Conscious Consumers

The vast majority of institutional buyers utilize conventional purchasing or "broadline" supply chains to ensure consistent and inexpensive products (Stahlbrand, 2017; Goger, 2018). However, there are a subset of institutions including hospitals, K-12 school systems, and colleges and universities that may act as "values-based" or "conscious" consumers. (Izumi, Wright, and Hamm, 2010; Conner et al., 2014; Thottathil, 2018). These institutions see value in the provision of "better" quality food, as it provides health or other benefits to their users. Conscious institutions may be more willing to engage in practices that benefit local and regional sourcing. They may be less cost dependent (or averse) and willing to undertake more complicated sourcing practices in order to

obtain better-quality products, overcoming a primary impediment to greater local food inclusion (Feenstra, 2011; Hardesty et al., 2014; Stahlbrand, 2017). Motivation for local food purchasing in the higher education sector is tied to benefits including improving connections to the local community, deeper connections with campus sustainability, improving the public image of the institution, and benefits to the local economy (Ng, Bednar, and Longely, 2010). There is currently no national summary of local food purchasing in higher education; however, a 2017 Farm to Institution New England (FINE) report provides insight into the purchasing habits of more than 100 colleges and universities in a six-state region. Amongst the participating institutions, 95% reported purchasing local foods with an average of 21% of their annual food budget dedicated to local food purchasing (FINE, 2017).

It is still an open question as to whether institutional purchasing has transformative capacity (Thottathil, 2018). One of the primary challenges associated with understanding institutions as transformative agents is the consumer orientation of the institutions themselves (Allen and Guthman, 2006; Barlett, 2017). Institutions are fundamentally constrained by the demands of their users. Additionally, the relationship between the institution and the market is often buffered by an intermediary food-service provider (Goger, 2018). Regardless of the interest or intent of the institution itself, the contractual relationship between the institution and foodservice provider will greatly inform purchasing decisions (Klein, 2015; Fitch and Santo, 2016; Barlett, 2017). It is of concern that the separation of the end consumer from the decision process in the institutional environment inhibits change or undercuts the fundamental change capacity of local foods (Delind, 2011; Mount, 2012; Nost, 2014). Other critiques state that any process that resides with an institution can be undone by that same institution, which begs the question of durability of institutional markets (Mount, 2012).

Foodservice Outsourcing in Higher Education

Outsourcing of non-primary functions (maintenance, foodservice, transportation) in higher education is a well-documented trend. Starting in the 1990s, institutions began to seek cost savings and upfront investment from outside providers of needed support services (LeBruto and Farsad, 1993; Gupta, Herath, and Mikouiza, 2005; Glickman et al., 2007; Wekolu, 2017). Despite recent commentary on a push to break from corporate foodservice (Anderson, 2021), the overwhelming trend in outsourcing has continued or even accelerated over the past 30 years. Documented estimates of total foodservice outsourcing in higher education have risen from 24% in 1997 (King, 1997) to 50% in 2005 (Gupta, 2005). The market is dominated by the "Big 3" corporations, Sodexo, Aramark, and Compass Group, control roughly 45% of the U.S. foodservice industry as a whole and a similar proportion in the college and university market (Fitch and Santo, 2016; MAFSI, 2017).

Privatization of college and university foodservice brings with it several potential challenges for institutions. Divestment of control over daily operations also means a loss of influence over quality and reliability standards (Lyons, 1997), which could negatively impact school reputation and retention (Gramling et al., 2005). Foodservice provider contract structure is of utmost importance, as the defined terms of the contract will guide procurement, labor relations, and profitability for

the provider (Glickman et al., 2007; Santo and Fitch, 2018; Henshaw, 2019). In addition, an increased use of preferred provider purchase agreements between campus foodservice providers and their suppliers has raised concerns over the real ability an institution has to encourage values-based sourcing (Santo and Fitch, 2018). Preferred provider contracts offer incentives to the institutional foodservice provider for purchasing a given percentage or dollar value of product from a particular supplier. The nature and extent of these contracts is often not known by the institution itself and may dramatically impact the purchasing habits of the provider (Fitch and Santo, 2016; Barlett, 2017; Santo and Fitch, 2018; Gaddis, 2019).

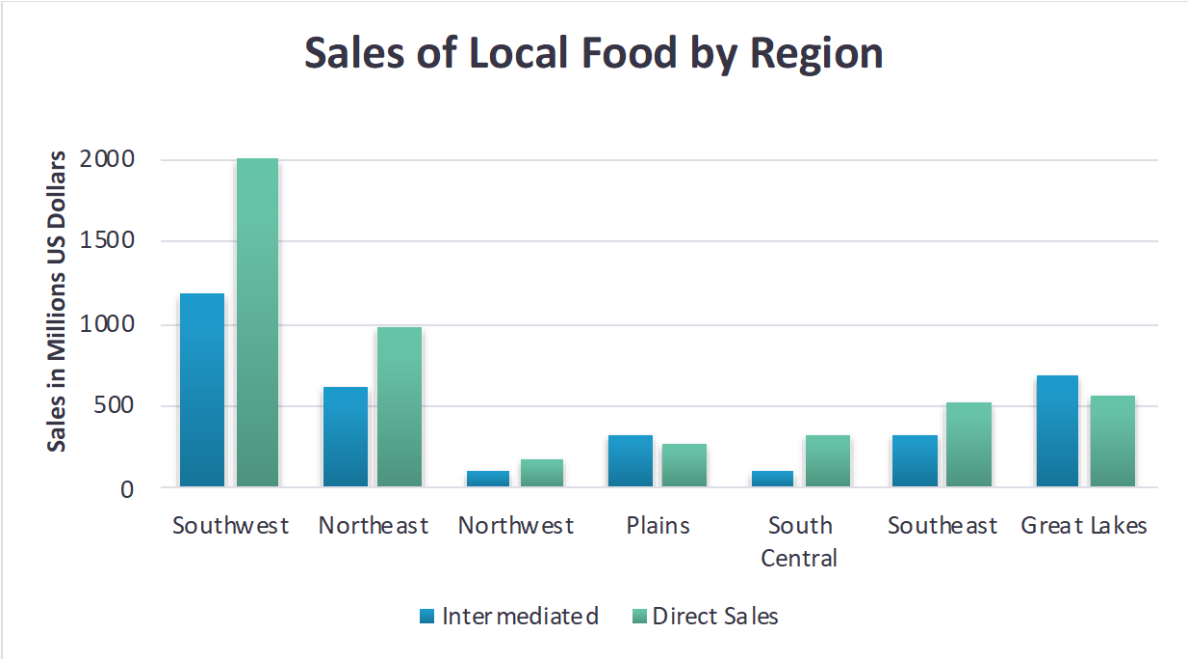
Foodservice Provider Structure and Regionality

This work uses three distinct foodservice management structures to analyze the potential for institutional engagement in values-based purchasing. Self-operated (self-op) dining services are those operated by the institutions themselves as embedded organizational structures. Self-op services generally have a greater level of flexibility in purchasing given their independent nature. Purchasing decisions can be made to meet the values of the institution and are less tied to, though not exclusive of, preferred provider contract arrangements (Lieb et al., 2012). In a sample of New England colleges and universities, self-op providers acquired local foods at a significantly higher rate than their outsourced counterparts. Local food purchases at self-op institutions accounted for 27.5% of annual food budgets as compared to 17.9% at institutions that outsourced to a foodservice management company (FINE, 2017). The second and third structures are both forms of outsourced contract foodservice management companies. Conventional foodservice management companies (broadline) focus on the provision foods at the most affordable price. We utilize the term "broadline" here in reference to the acquisition of the majority of products from a handful of broadline suppliers (Howard, 2016). Broadline management companies tend to be tied more closely to corporate menu development and supply structures that allow for efficiency and price reduction across a variety of institutional accounts (Henshaw, 2019). Finally, "fresh-prep" providers are management companies that espouse corporate values associated with cooking from scratch rather than heat-and-serve meals. Corporate oversight of menus and purchasing mandates are less stringent for fresh-prep providers, offering greater flexibility in sourcing at an individual institutional level (Henshaw, 2019). While the obligation to purchase locally is highly variable based on institutional contracts and mandates, fresh-prep providers have, with proper motivation, yielded local purchasing rates of greater than 35% of annual food budget at institutions in the Great Lakes region (Henshaw, 2019). No single provider structure guarantees higher rates of local food purchasing, but there is sufficient evidence of variability between provider type to warrant continued evaluation of these structures.

Little research has engaged with patterns of regional variability in higher education foodservice outsourcing. The potential for providers to source greater quantities of local and regional product is tied directly to the presence of sufficient regional production and supply chain infrastructure that allows for consistent supply (Feenstra et al., 2011; Berti and Mulligan, 2016; Goger 2018). Distinct regional patterns exist in both direct-to-consumer marketing and intermediated marketing of consumer products within short supply chains. Both forms of sales are highest in the Northeast, Southwest, and Great Lakes regions (see Figure 1) (Low et al., 2015). The primary differentiation

between farms that direct market and those that utilize intermediated markets is urban proximity, based on a higher density of farms and greater aggregation infrastructure (Low and Vogel, 2011; Dimitri and Gardner, 2018). We expect to see higher concentrations of self-op and fresh-prep foodservice providers in regions with more direct market capacity.

Given increased interest in the transformative capacity of institutions to enhance a regional food economy and the complexity of an intermediated food purchasing environment in the institutional context, increased understanding of the relationship between institutions and providers is valuable.



Source: USDA NASS, 2015 Local Food Marketing Practices Survey[1]

Figure 1. Intermediated Sales and Direct-to-Consumer Sales by Region in Millions of Dollars

Methods

A list of residential institutions of higher education was created using the publicly available Integrated Postsecondary Education Data System (IPEDS) 2016–2017 institutional data. IPEDS is an annual survey conducted by the U.S. Department of Education. Participation is compulsory for all colleges, universities, and technical and vocational institutions that participate in federal student aid programs. An initial list of 7,224 institutions was narrowed to 1,595 by excluding all institutions that did not have room and board data and admissions data, as this research was primarily focused on residential institutions or institutions that had a residential option. Foodservice provider data was manually collected from institution and provider websites from September 2019 to June 2020, resulting in the final dataset of 1,404 institutions for which provider

[1] Northeast (CT, DE, ME, MD, MA, NH, NJ, NY, PA, RI, VT), Great Lakes (IL, IN, MI, OH, WI), Plains (IA, KS, MN, MO, NE, ND, SD), Southeast (FL, GA, KY, NC, SC, TN, VA, WV), South Central (AL, AR, LA, MS, OK, TX), Southwest (AZ, CA, CO, HI, NV, NM, UT), and Northwest (AK, ID, MT, OR, WA, WY).

information was available. The name and contact information for each provider was entered into Excel, and then each provider was categorized as either "self-op" or "outsourced." Outsourced providers were then broken into two categories—"Broadline" and "Fresh-prep"—following Henshaw (2019). "Fresh-prep" providers were identified as companies that made a public commitment to scratch cooking on their websites. All other providers were classified as "Broadline." Provider data were merged into existing IPEDS data using SPSS (version 27), and regional patterns were analyzed.

Graphical distribution maps were generated using QGIS (3.4) from the location data for each institution provided in IPEDS. The relationship between regions and provider type was tested using SPSS (version 27) crosstab function with X^2 test of independence and Cramer's V measure of association. Cramer's V measures the level of association between nominal variables on a scale of 0–1 with 0 being no association. Strength of association is guided by the degrees of freedom in each test following Coen (1977), where 0.04 is considered small, 0.13 medium, and 0.22 large.

Regional variability in direct-to-consumer sales and intermediated market sales was derived from the U.S. Department of Agriculture, National Agricultural Statistics Service, 2015 Local Food Marketing Practices Survey. Intermediated markets are defined as the sales to "institutions such as schools, colleges, universities, and hospitals as well as intermediary businesses such as wholesalers, distributors, processors, etc., that market locally or regionally branded products" (USDA-NASS, 2016, p. 2).

Results

Percent of Outsourced Foodservice

A contracted foodservice provider was employed by 72.7% of colleges and universities (see Figure 2). Significant [X^2 (6, N = 1397) = 36.68, $p < .001$] and moderately strong relationships [Cramer's $V = .162$] in regional variability exist in foodservice outsourcing. Foodservice outsourcing occurs at different rates in different regions with the South Central and Southeast regions outsourcing at the highest rates (> 80%), while the Northwest has the highest concentration of self-op foodservice (~45%).

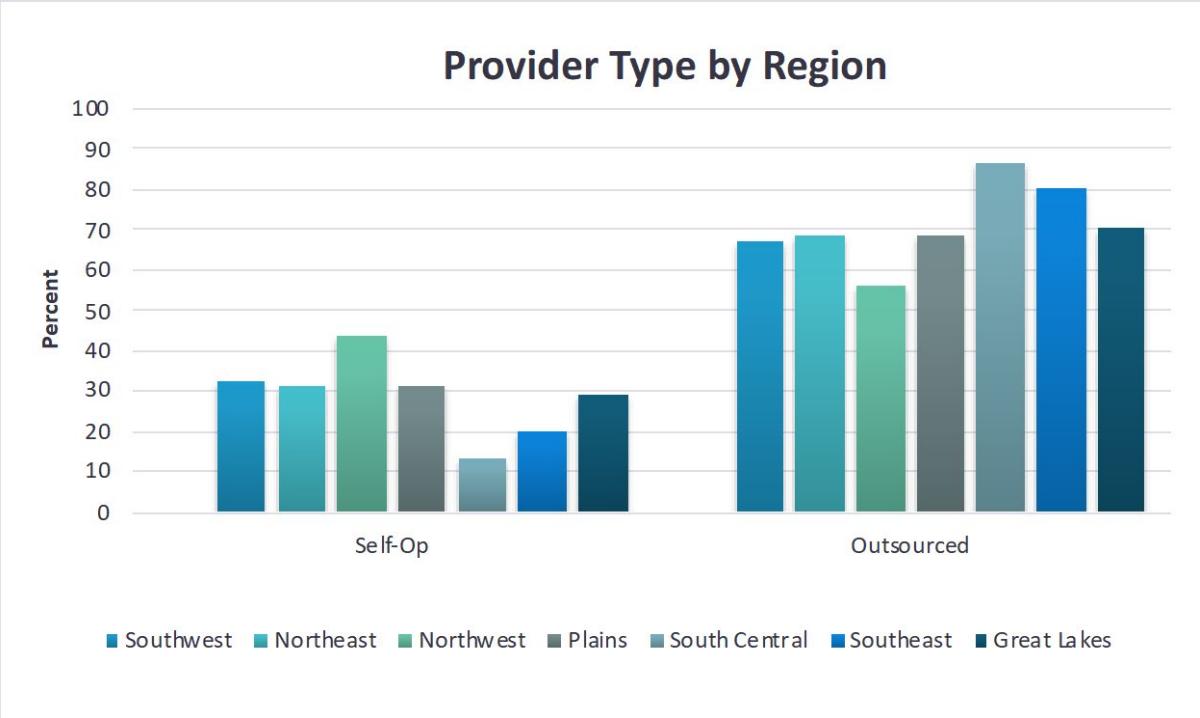


Figure 2. Percentage of Self-op and Outsourced Foodservice by Region

Regional Distribution by Provider Type

Extraction of fresh-prep providers from the outsourced total continues to indicate significant [X^2 (12, N = 1397) = 92.818, $p < .001$] and moderately strong relationships [Cramer's $V = .182$] in regional variability (see Figure 3). Combining self-op and fresh-prep providers into a single group in contrast with broadline providers indicates a strong [Cramer's $V = .232$] significant [X^2 (6, N = 1397) = 74.89, $p < .001$] relationship in regional variability (see Figure 4).

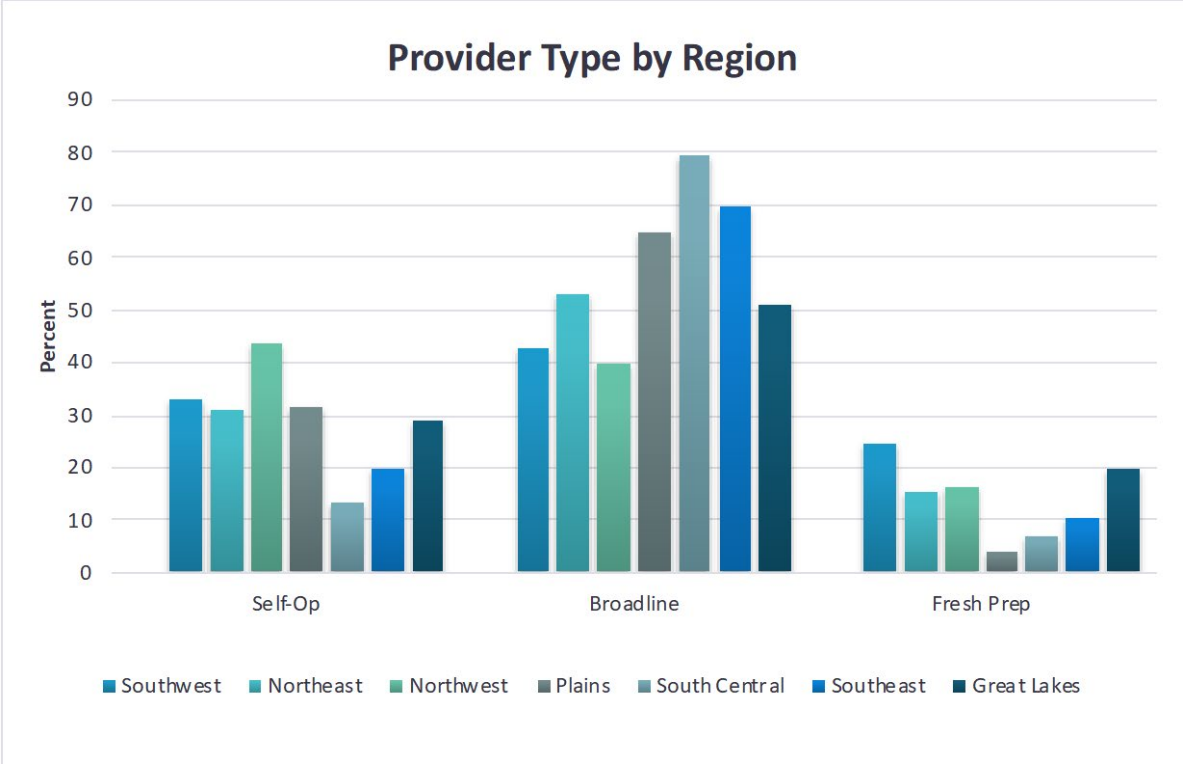


Figure 3. Percent of Providers by Type and Region Including Fresh Prep

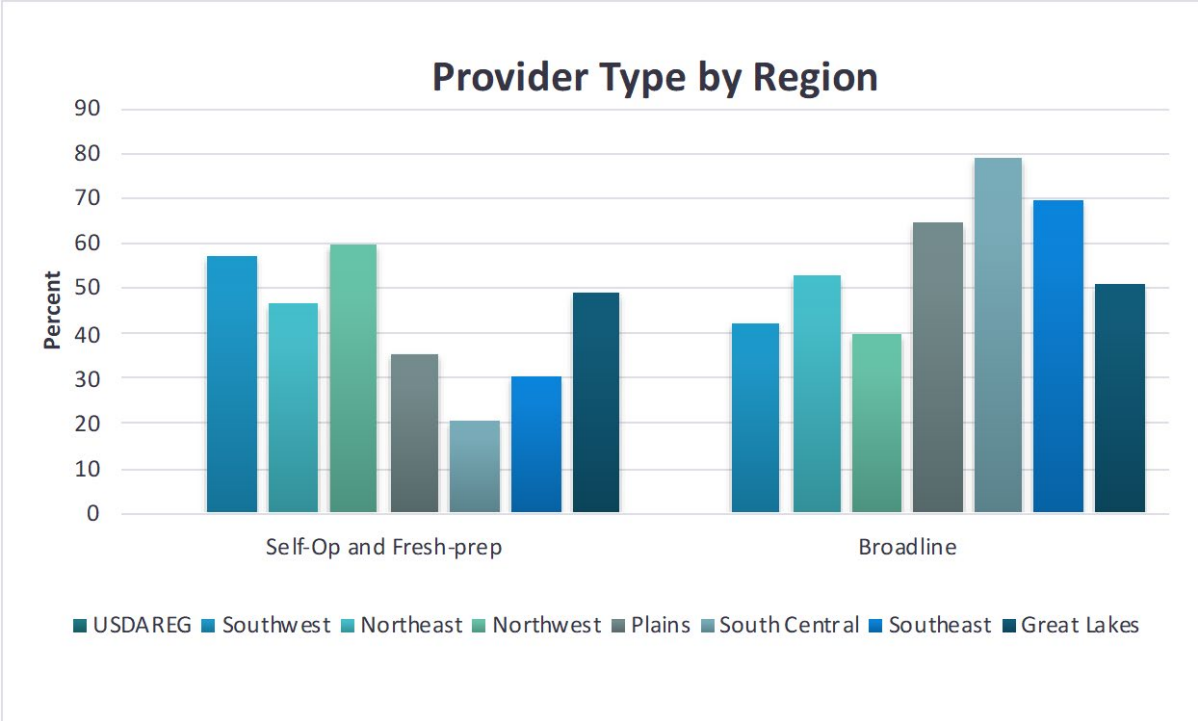


Figure 4. Percent of Providers by Type and Region: Self-op and Fresh-prep Combined

Dot distribution maps of the three provider categories are presented in Figures 5, 6, and 7.

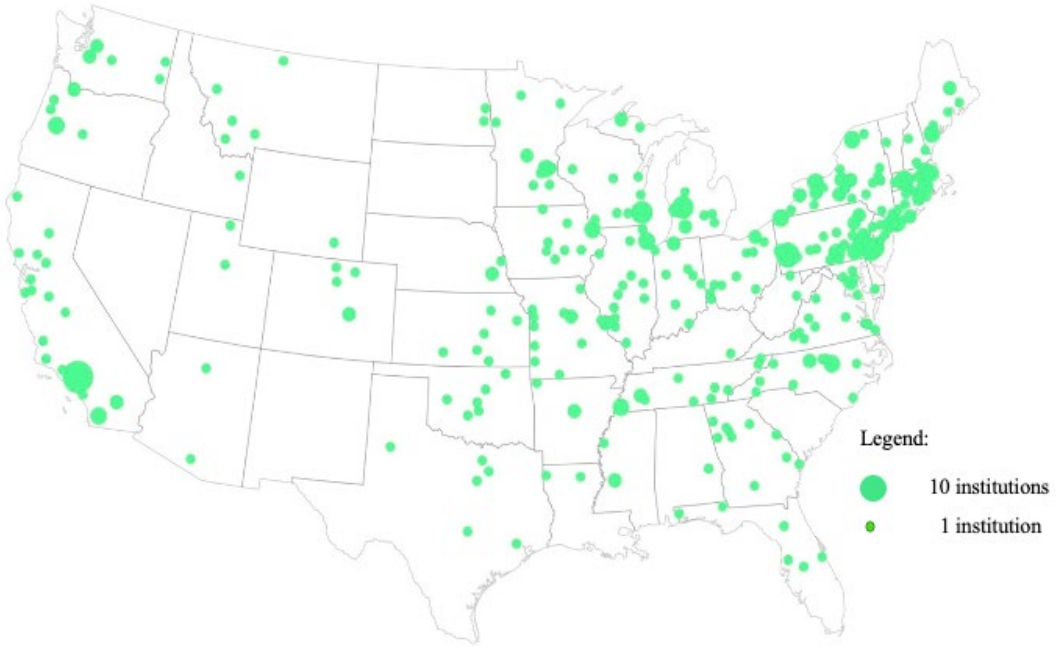


Figure 5. Self-operated Dining Services at Colleges and Universities in the Continental United States

Figure 6. Broadline Dining Services at Colleges and Universities in the Continental United States

Figure 7. Fresh-prep Dining Services at Colleges and Universities in the Continental United States

Discussion

Rates and Regional Variability in Outsourcing

This analysis of outsourcing trends is the most comprehensive one currently available (1,397 total institutions) and shows a continued pattern of expansion in outsourcing. Rates have continued to increase at each documented interval, from 25% (King, 1997) to 50% (Gupta, 2005) to 72.7%.

Significant relationships exist between regions and the type of foodservice provider used by institutions of higher education. This is a novel result as regional patterns of foodservice outsourcing have not been previously noted in the literature. A simple division between self-op and outsourced foodservices shows marginal variability in regional percentages with all regions outsourcing between 55%–85% of their foodservice. This variation may reflect a variety of decision-making parameters not captured in this study, including regional concentrations of public versus private institutions (Gupta et al., 2005), decreases in state-level funding (Wekulo, 2017), or the state and regional political atmosphere.

The extraction of the fresh-prep provider data from the outsourced total enhances patterns in regional variability. Institutions in the Plains states, while not outsourcing at a greater rate than other regions, appear to be making a dichotomous decision between self-op and broadline provision. The contracting of fresh prep providers in the Southwest, Northeast, Northwest, and Great Lakes regions (> 15% of all providers) serves to highlight the inclination of institutions in

the Southeast (69%) and South Central (79%) regions not just to outsource, but to outsource to broadline providers.

When combined, self-op and fresh-prep providers represent roughly half (45%–60%) of all providers in the Southwest, Northeast, Northwest, and Great Lakes regions. In three of these regions (Northeast, Southwest, and Great Lakes), the greater presence of self-op and fresh-perp foodservice providers is consistent with local farm sales to both direct and intermediated markets (Low et al., 2015; USDA-NASS, 2016). The greater willingness or capacity of self-op and fresh-prep providers to engage in local purchasing (FINE, 2017; Henshaw 2019) may be coincident with the presence of greater infrastructure for processing and distribution in the region (Feenstra et al., 2011; Berti and Mulligan, 2016; Goger, 2018). While there is no indication in this analysis of the timing of the emergence of fresh-prep providers relative to other infrastructural projects, the coexistence of these actors speaks to the capacity of new institutional markets to integrate into value chain supply channels at a regional level.

One region, the Northwest, is highly anomalous to this trend. The Northwest has both the highest percentage of self-op providers and the highest total percentage of self-op and fresh-prep providers. It is, however, also the region with the lowest combined regional sales through direct and intermediated markets. This break from the broader pattern may very well be an artifact of the U.S. Department of Agriculture sales region creation that combines dense Northwest urban populations of Seattle and Portland with sparsely populated regions of Wyoming, Montana, and Idaho. However, it does indicate that attention should be given to subregional variability as we consider regional agglomeration in food purchasing.

Implications for Local and Regional Food Purchasing

The place of the conscious consumer in the development of local food value chains is one of utmost importance (Thottathil, 2019). The capacity of the system to scale into midsized production and distribution is dependent largely on stable markets that value differentiated products (Diamond and Barham, 2012). This work contributes to a relatively small body of literature that engages these institutional structures. Regional relationships between local food infrastructure and higher education foodservice providers with a propensity toward local foods purchasing is optimistic for the role of colleges and universities as conscious consumers. Substantial utilization of the fresh-prep provider in regions with high local food infrastructure indicates a pathway for values-based purchasing that does not require the reintegration of foodservice back into institutions that have made past outsourcing decisions.

While there is no inherent relationship between any provider type and a willingness to purchase food in a conscious manner (Henshaw, 2019), there do appear to be opportunities for expansion and growth in the higher education market. It is important to recognize that investments in regional infrastructure and purchasing do not happen in a vacuum. Purchasing by institutions that encourages growth in aggregation, processing, or production will likely have spillover effects in the market as a whole, making products more available to a broader spectrum of consumers and accounts.

Conclusion

As our understanding of values-based food supply chains increases, there is a growing need for analysis of actors that will play a role in the development of opportunities in this market segment. The sheer size of the higher education foodservice sector means that significant gains in integrating local and regional food purchasing into higher education could be transformative for local food economies. There is good reason to believe that colleges and universities have the capacity to act as conscious consumers. However, increasing percentages of outsourced foodservice (now 75% nationally) bring into question the nature of the institution-consumer relationship. This research indicates that those patterns are more complex than a simple focus on the percentage of outsourced providers might indicate. There is significant regional variability in outsourcing. This regionality highlights both opportunities for market growth and areas in which that growth may be more challenging. In addition, the use of the fresh-prep provider indicates that the decision to outsource may take multiple pathways and not, in and of itself, be exclusionary to the growth of local and regional purchasing in higher education.

References

Allen, P., and J. Guthman. 2006. "From 'Old School' to 'Farm-to-School': Neoliberalization From the Ground Up." *Agriculture and Human Values* 23(4): 401–415.

Anderson, G. 2021. "Colleges Break from Corporate Dining Services." *Inside Higher Education*. Available online: https://www.insidehighered.com/news/2021/03/31/movement-against-corporatized-campus-dining-services-renewed.

Barham, L., D. Tropp, K. Enterline, J. Fisk, and S. Kiraly. 2012. *Regional Food Hub Resource Guide*. Washington, DC: U.S. Department of Agriculture, Agriculture Marketing Service.

Barlett, P. 2017. "Campus Alternative Food Projects and Foodservice Realities: Alternative Strategies." *Human Organization* 76: 189–203.

Berti, G., and C. Mulligan. 2016. "Competitiveness of Small Farms and Innovative Supply Chains: The Role of Food Hubs in Creating Sustainable Regional and Local Food Systems." *Sustainability* 8(7): 616.

Bloom, D., and C.C. Hinrichs. 2011. "Moving Local Food Through Conventional Food System Infrastructure: Value Chain Framework Comparisons and Insights." *Renewable Agriculture and Food Systems* 26(1): 12–23.

Buttel, F.H., and P. LaRamee. 1987. "The 'Disappearing Middle': A Sociological Perspective." *Paper Presented at the Rural Sociological Society Conference, Madison, WI.*

Clancy, K., and K. Ruhf. 2010. "Is Local Enough? Some Arguments for Regional Food Systems." *Choices* 25(1).

Clark, J.K., and S.M. Inwood. 2016. "Scaling-up Regional Fruit and Vegetable Distribution: Potential for Adaptive Change in the Food System." *Agriculture and Human Values* 33(3): 503–519.

Coen, J. 1977. *Statistical Power for the Behavioral Sciences,* revised ed. New York, NY: Academic Press, Inc.

Conner, D.S., N. Sevoian, S.N. Harris, and L. Berlin. 2014. "The Diverse Values and Motivations of Vermont Farm to Institution Supply Chain Actors." *Journal of Agricultural and Environmental Ethics* 27(5): 695–713.

Delind, L.B. 2011. "Are Local Foods and the Local Food Movement Taking Us Where We Want to Go? Or Are We Hitching Our Wagons to the Wrong Stars?" *Agriculture and Human Values* 28(2): 273–283.

Diamond, A., and J.Barham. 2012. *Moving Food along the Value Chain: Innovations in Regional Food Distribution*. Washington, D.C.: U.S. Department of Agriculture, Agricultural Marketing Service.

Dimitri, C., and K. Gardner. 2018. "Farmer Use of Intermediated Market Channels: A Review." *Renewable Agriculture and Food Systems* 34(3): 181–197.

Eakin, H., J.P. Connors, C. Wharton, F. Bertmann, A. Xiong, and J. Stoltzfus. 2017. "Identifying Attributes of Food System Sustainability: Emerging Themes and Consensus." *Agriculture and Human Values* 34(3): 757–773.

Feenstra G.W., P. Allen, S. Hardesty, J. Ohmart, and J. Perez. 2011. "Using Supply Cahin Analysis to Assess the Sustainability of Farm-to-Institution Programs." *Journal of Agriculture, Food Systems, and Community Development* 1(4): 69–84.

FINE (Farm to Institution New England). 2017. "Campus Dining 101: Benchmark Study of Farm to College in New England." Available online: https://www.farmtoinstitution.org/sites/default/files/imce/uploads/FINE%20Farm%20to%20College%20Report_1.pdf.

Fitch, C., and R. Santo. 2016. *Instituting Change: An Overview of Institutional Food Procurement and Recommendations for Improvement*. Baltimore, MD: The John Hopkins Center for a Livable Future.

Friedmann, H. 2007. "Scaling Up: Bringing Public Institutions and Foodservice Corporations into the Project for a Local, Sustainable, Food System in Ontario." *Agriculture and Human Values* 24(3): 389–398.

Gaddis, J.E. 2019. "The Big Business of School Meals." *Phi Delta Kappan* 102(2): 21–25.

Glickman, T.S., J. Holm, D. Keating, C. Pannait, and S.C. White. 2007. "Outsourcing on American Campuses: National Developments and the Foodservice Experience at GWU." *International Journal of Educational Management,* 21(5): 440–452.

Goger, A.M. 2018. "Situating Institutional Foodservice in Agro-Food Value Chains: Overcoming Market Power and Structure with Values-Based Procurement." In S.E. Thottahil and A.M. Goger, eds. *Institutions as Conscious Food Consumers.* London, United Kingdom: Academic Press, pp. 3–20.

Gramling, L., R. Byrd, L. Epps, D. Keith, R. Lick, and R. Tian. 2005. "Foodservice Management and Its Impacts in College Operations: A Business Anthropological Case Study." *Journal of Foodservice* 16: 15–43.

Gupta, A., S.K. Herath, and N.C. Mikouiza. 2005. "Outsourcing in Higher Education: An Empirical Examination." *International Journal of Educational Management* 19: 396–412.

Hardesty, F., G. Feenstra, D. Visher, T. Lerman, D. Thilmany-McFadden, A. Baurman, T. Gilpatrick, and G.N. Rainbolt. 2014. "Values-based Supply Chain: Supporting Regional Food and Farms." *Economic Development Quarterly* 28(1): 17–27.

Henshaw, T.L. 2019. "Is the Emergence of the 'Fresh Prep' Foodservice Provider an Entrée into Local Foods?" *Culture, Agriculture, Food and Environment* 41(2): 140–148.

Howard, P. 2016. *Concentration and Power in the Food System: Who Controls What We Eat?* New York, NY: Bloomsburry Academic.

Izumi, B.T., D.W. Wright, and M.W. Hamm. 2010. "Farm to School Programs: Exploring the Role of Regionally Based Food Distribution in Alternative Agrifood Networks." *Agricultue and Human Values* 27: 335–350.

King, P. 1997. "Contractors Give 'The Old College Try' in Battle for University Food Dollars." *Nations's Restaurant News* 13: 57–61.

Kirschenmann, F., G.W. Stevenson, F. Buttel, T.A. Lyson, and M. Duffy. 2008. "Why Worry about Agriculture of the Middle?" In T.A. Lyson, G.W. Stevenson, and R. Welsh, eds. *Food and the Mid-level Farm: Reviewing and Agriculture of the Middle*. Cambridge, MA: MIT Press, pp. 3–22.

Klein, K. 2015. "Values-based Food Procurement in Hospitals: The Role of Health Care Group Purchasing Organizations." *Agriculture and Human Values* 32(4): 635–648.

LeBruto, S.M., and B. Farsad. 1993. "Contracted School Foodservice: Advantages, Disadvantages, and Political Concerns." *Hospitality Review* 11: 57–67.

Leib, A., J. Abrams, V. Lee, A. Jaffee, C. Foley, and E. Schwartz. 2012. *Increasing Local Food Procurement by Massachusetts State Colleges and Universities*. Cambridge, MA: Harvard Law School, Food Law and Policy Clinic.

Lobao, L., and C.W. Stofferhan. 2008. "The Community Effects of Industrialized Farming: Social Science Research and Challenges to Corporate Farming Laws." *Agriculture and Human Values* 25(2): 219–240.

Lobao, L., and K. Meyer. 2001. "The Great Agricultural Transition: Crisis, Change, and Social Consequences of Twentieth Century US Farming." *Annual Review of Sociology* 27(1): 103–124.

Low, S.A., A. Adalija, E. Beaulieu, N. Key, S. Martinez, A. Melton, A. Perez, K. Ralston, H. Stewart, S. Suttles, and B.B.R. Jablonski. 2015. *Trends in U.S. Local and Regional Food Systems* (Ap-068). Washington, D.C.: U.S. Department of Agriculture, Economic Research Service.

Low, S.A., and S.J. Vogel. 2011. "Direct and Intermediated Marketing of Local Foods in the United States." Washington, DC: U.S. Department of Agriculture, Economic Research Service, Report 128.

Lyons, J.E. 1997. "Contracting Out for Public School Support Services." *Education and Urban Society* 27: 154–167.

Lyson, T.A., and A. Guptill. 2004. "Commodity Agriculture, Civic Agriculture, and the Future of US Farming." *Rural Sociology* 69(3): 370–385.

MAFSI. 2017. *Commercial Foodservice Market Forecast.* Atlanta, GA: MAFSI.

Moragues-Faus, A., R. Sonnino, and T. Mardsen. 2017. "Exploring European Food System Vulnerabilities: Towards Integrated Food Security Governance." *Environmental Science & Policy* 75: 184–215.

Mount, P. 2012. "Growing Local Food: Scale and Local Food Systems Governance." *Agriculture and Human Values* 29(1): 107–121.

Ng, S.L., C.M. Bednar, and C. Longley. 2010. "Challenges, Benefits, and Strategies of Implementing a Farm-to-Cafeteria Program in College and University Foodservice Operations." *Journal of Foodservice Management & Education* 4(1): 22–27.

Nost, E. 2014. "Scaling Up Local Foods: Commodity Practice in Community-supported Agriculture (CSA)." *Journal of Rural Studies* 34: 152–160.

Santo, R.E., and C.M. Fitch. 2018. "From Foodservice Management Contracts to U.S. Federal Legislation: Progress and Barriers in Values-Based Food Procurement Policies." In S.E.

Thottahil and A.M. Goger, eds. *Institutions as Conscious Food Consumers.* London, United Kingdom: Academic Press, pp. 78–96.

Stahlbrand, L. 2017. "Can Values-Based Food Choices Advance Local Sustainable Food Systems? Evidence from Case Studies of University Procurement in Canada and the UK." *International Journal of the Sociology of Agriculture and Food* 24: 77–95.

Stevenson, G.W., and R. Pirog. 2008. "Values-based Supply Chains: Strategies for Agrifood Enterprises of the Middle." In T.A. Lyson, G.W. Stevenson, and R. Welsh, eds. Food and the Mid-level Farm: Reviewing and Agriculture of the Middle. Cambridge, MA: MIT Press, pp. 119–143.

Stevenson, G.W., K. Clancy, R. King, L. Lev, M. Ostrom, and S. Smith. 2011. "Mid-scale Food Value Chains: An Introduction." *Journal of Agriculture, Food Systems, and Community Development* 1(4): 27–34.

Thottathil, S.E. 2019. "Introduction: Institutions as Conscious Food Consumers." In S.E. Thottahil and A.M. Goger, eds. *Institutions as Conscious Food Consumers.* London, United Kingdom: Academic Press, pp. 3–20.

Tilman, D., K.G. Cassman, P.A. Matson, R. Nayor, and S. Polasky. 2002. "Agricultural Sustainability and Intensive Production Practices." *Nature* 418: 671–677.

U.S. Department of Agriculture. 2016. "Direct Farm Sales of Food. Results from the 2015 Local Food Marketing Practice Survey." Washington, DC: U.S. Department of Agriculture, National Agricultural Statistics Service, Report ACH 12-35.

Wekolu, C.S. 2017. "Outsourcing in Higher Education: The Known and Unknown about the Practice." *Journal of Higher Education and Policy Management* 39(4): 453–468.