

Buying Local?

An exploratory analysis of barriers to local food sales from the perspective of intermediary buyers in California and North Carolina

PRELIMINARY DRAFT: NOT FOR CITATION

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Introduction

Proponents of local food system development claim positive economic impacts and improvements in social outcomes; Gunter et al. (2012) and Pearson and Bailey (2012) provide numerous examples from the literature supporting the interconnected economic, community, and environmental benefits of local food supply chains. A recent USDA Service Report recognizes a continued “surge in [consumer interest in] buying locally produced foods and supporting local agriculture” (Matson et al. 2013) in the United States.

Growing demand for local food is observed in increased local food sales through mid-sized wholesale operations such as institutions, restaurants and grocery stores. Direct-to-consumer marketing (e.g., farmers’ markets, CSA’s) is likely the most recognizable face of local food, but continued growth in local food sales requires increasing intermediated sales through institutions, restaurants, and retail markets, which account for a majority of local food sales revenue (Low and Vogel, 2011). Evidence suggests local food sales in intermediated market channels have been limited by high transactions costs, lack of infrastructure for storage and aggregation, high numbers of producer suppliers, cash flow, inconsistent quality of supply, and variation in demand (Martinez, et. al., 2010, Lerman, 2012).

Lerman (2012) discusses so-called “values-based” supply chains, which preserve the identity of producers and have a local/regional focus, as a potential solution to these challenges, and several studies have examined local food supply chain businesses such as food hubs to identify common opportunities and challenges. Diamond and Barham (2011) cite the central importance of appropriate infrastructure, farm identity preservation, farmer coordination, and legal structures. The authors note that a core competency of distribution models designed to serve smaller-scale producers must be “to effectively coordinate production and aggregate products in a way that can satisfy a buyer’s volume requirements, quality standards, and need for consistent and timely deliveries” (Diamond and Barham, 2011).

Significant attention has been paid to local food production and aggregation/coordination businesses (e.g., food hubs), but relatively few studies have focused on understanding intermediated local food market channels from the perspective of buyers such as restaurants, school districts, and grocery stores. Local governments, economic development professionals, and food system entrepreneurs analyzing investments in local food system development need a better understanding of factors driving or inhibiting local food purchases to better understand how policy can help overcome these obstacles.

This paper presents an exploratory analysis of barriers to local food purchases from the perspective of intermediary food buyers using data generated by geographically distinct surveys in rural Northern California and the Sandhills region of North Carolina. The surveys examined buyer perceptions of how local food purchases are affected by demand, transactions costs (vendor requirements), and food safety. Comparison of the results of the two spatially segregated surveys provides initial insights into intermediary buyer local food purchasing behavior, perceived barriers to local food purchasing, and how behavior and barriers may differ across regions. Entrepreneurs and policy makers seeking to address barriers to local food sales

can gain from increased understanding of buyer behaviors and attitudes, and the results can be used to guide future applied research projects.

Methods and Data

This paper uses data from buyer surveys conducted in rural Northern California (Northern CA) and the Sandhills region of North Carolina (Sandhills) to explore barriers to local food purchases from the perspective of intermediary buyers such as restaurants and retail food stores.

Purposive sampling was used to select intermediary buyers to be surveyed in each region. The samples included hospitals, school districts, colleges and universities, restaurants, food catering businesses, grocery and specialty retail stores, assisted living facilities, and resorts. A total of 25 buyers in California and 27 buyers in North Carolina were surveyed. Table 1 reports the participating buyers in each region, categorized by type.

Surveys were conducted as in-person, semi-structured, mixed methods interviews, and included both quantitative and qualitative questions. Quantitative questions were both open- and closed-ended. Surveys in both regions were conducted over several months. In the Sandhills study, some respondents did not complete the surveys in their entirety, but responses from these incomplete surveys are included in the results, where applicable. Frequencies within and across buyer categories were computed for quantitative variables, and qualitative responses were compiled and coded to identify themes.

The definition of “local” used in both surveys was based on distance and covered roughly the same total area: Northern California respondents were asked to use a 100-mile radius, and Sandhills region participants were asked to use a tri-county region.

Table 1. Participating Buyers by Category

	Sandhills Region	Northern CA
Restaurants/Catering	7	10
Assisted Living Centers	7	-
Resorts	6	-
Institutions	6	8
Specialty Food/Retail	1	7
Total	27	25

The restaurant and catering respondents in both surveys were primarily privately owned and operated, and served middle to high-end markets. While individual restaurants and catering businesses tend to purchase smaller volumes than entities such as resorts and schools, they also were more numerous in both survey regions. Restaurants and catering companies typically order food several times a week, often on very short notice, and expect a high degree of flexibility in product choice and delivery.

Resorts were only included in the Sandhills region sample, but represented a significant potential source of fresh produce demand, especially during the peak seasons of spring and fall. Because of their volume requirements, large resorts reported placing orders 5-6 times per week during their busy seasons, and expect next day delivery from their suppliers.

Institutional buyers surveyed in each region included hospitals, primary and secondary schools, and institutions of higher education. Along with the assisted living facilities surveyed in the Sandhills region, these entities represent a large potential market for local food. However, because they often schedule menus in advance, these entity types tend to require a high level of structure in purchasing, supply and delivery, and need suppliers that can provide significant advanced notice of product availability. These entities also tend to have the most stringent food safety standards, often requiring suppliers to have documented or certified food safety practices.

Several specialty grocery stores and other specialty food retailers were surveyed in Northern California, and one specialty retail store was surveyed in the Sandhills region. These businesses varied significantly in size and scope, from small, privately owned specialty food businesses selling fresh and/or value-added food products, to mid-scale, independent, full service grocery stores. As expected, their purchasing patterns and requirements varied significantly as well.

Purchasing volumes were similar across the survey regions within buyer types. The Sandhills NC survey queried businesses about their purchases of produce, and 13 Sandhills participants provided average weekly produce expenditures or ranges. The average annual purchasing ranges are reported in Table 2 by entity type.

Table 2. Annual average produce purchasing ranges reported, Sandhills region

	Annual Average	
Assisted Living Facilities	\$15,600	- \$23,400
Restaurants	\$15,600	- \$350,000
Institutions	\$85,800	- \$111,800
Resorts	\$377,000	- \$559,000
Specialty Grocer	\$1,456,000	- \$1,560,000

Northern CA survey participants were asked to report their total food expenditures by size category, and the results are presented in Table 3.

Table 3. Total reported food purchasing, Northern CA

	< \$100k	\$100k- \$250k	> \$250k	Not Available
Restaurants/Catering	20%	30%	50%	0%
Institutions	0%	13%	63%	26%
Specialty Food Retail	43%	14%	29%	14%

Northern CA restaurant respondents exhibited a slightly larger volume of food purchases than the Sandhills participants, with the majority of respondents self-categorizing in the \$100,000 or greater categories. Institutional purchasing volumes were generally higher in Northern CA than in the Sandhills region, with the majority of responses indicating a range greater than \$250,000, but this difference may be explained by the Sandhills average being for produce only. The sole specialty grocer in the Sandhills NC survey reported a range around \$1.5 million, while a large share of Northern CA specialty food retail businesses reported less than \$100,000 in food purchases.

Both the Sandhills and Northern CA regions are rural, but access to local food differs markedly between the regions, and these differences are partially revealed in buyer purchasing patterns. Table 4 reports buyer purchasing patterns (for all food products, not just local) from each survey. Respondents in Northern CA purchased food products from a diverse set of sources, including several that are primarily local: 88% of buyers purchased directly from growers, 52% from farmers’ markets, and 40% from retail food cooperatives. The high levels of local food purchasing in the Northern CA study may reflect the sample of buyers interviewed, as well as regional factors such as diverse agricultural production, strong consumer interest in local foods, and the maturity of direct and intermediated local food marketing.

In contrast to the Northern CA region, Sandhills buyers generally reported not having ready access to local food. Despite this, 23% of Sandhills buyers indicated they purchase directly from local growers, and 23% of respondents purchased through a wholesale broker/packer in the Sandhills region that offers a separate line of North Carolina products sourced from within the state as a regular part of their product list.

Table 4. Intermediated buyer purchasing patterns

<i>From which of the following do you purchase food products?</i>	Northern CA %	Sandhills NC %	Total Responses (%; n=47)
Wholesale broker/packer	96%	77%	87%
Grocery Store	68%	0%	36%
Retail food cooperative	40%	0%	21%
Farmer’s market	52%	0%	49%
Grower	88%	23%	57%
Other	8%	18%	13%

Survey Results

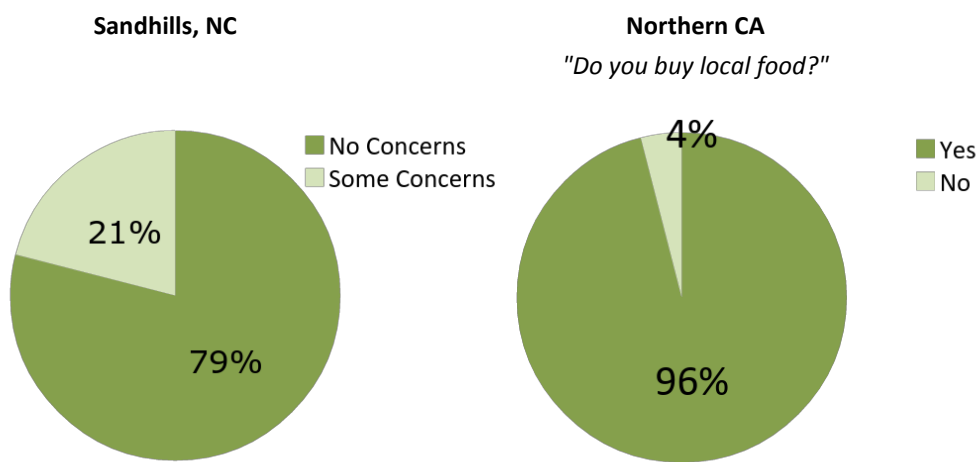
Comparison of the results of the Northern CA and Sandhills NC surveys provides initial insights into intermediary buyer local food purchasing behavior and perceived barriers to local food purchasing. We summarize key findings from our comparative analysis into three categories: demand for local food, transactions costs (key buyer requirements of vendors), and food safety requirements.

Buyer Demand for Local Foods

Buyer interest in sourcing local food did not appear to be a barrier to respondents in either survey; Sandhills NC respondents demonstrated a strong willingness to source products locally, and the vast majority of Northern CA respondents reported already purchasing from some form of local foods source. Figure 1 summarizes buyer demand for local foods in the two surveys. When asked “Do you purchase local food products?” 96% of Northern CA respondents said “Yes.” A majority (79%) of the participants in the Sandhills survey reported “no concerns” with local sourcing of food.

Sandhills respondents indicated a high level of willingness to increase local purchases if consistent sources were available, with 100% indicating they would consider purchasing produce from a local vendor if they could consistently supply most, if not all, of their produce needs. Responses were nearly unanimous (95%) that existing relationships with suppliers would not suffer should they choose to begin sourcing food from local food suppliers.

Figure 1. Support for local foods purchases



Summing across surveys further reveals support for local purchasing, even when taking into account the lack of local food supply entities in the Sandhills region. As seen in Table 4, the number of buyers purchasing directly from growers (57%) and at farmers markets (49%) followed only wholesale purchasing (87%) as the most common food product purchasing methods.

The high level of interest in buying local may be due, at least in part, to strong consumer interest in the survey regions: in the Northern CA survey, 70% of buyers reported that a lack of consumer interest in local food was “Not a Barrier” limiting their local food purchases.

Transactions Costs (Buyer Requirements of Vendors)

Relatively high transactions costs are often proposed as an important barrier to increased local and regional food sales, and can stem from higher information costs (e.g., finding suppliers), higher costs of contracting and conducting local food purchases, and higher costs of enforcing contracts. Across both surveys, buyers indicated that these transaction costs were of central importance in their decision-making process, and that managing transactions costs was necessary for the viability of sustained increases in local food sales.

Both surveys investigated buyers' perceptions of the relative importance of various sources of transactions costs by asking intermediary buyers about their requirements of food suppliers (e.g., growers, distributors). The Northern CA survey included a series of questions asking buyers to rank potential challenges as "Not a Barrier," "Minor Barrier," or "Major Barrier" to purchasing local food. Items ranked as either a "Major Barrier" or "Minor Barrier" by a majority of respondents included: streamlined communication, cost of maintaining multiple vendor relationships, difficulty in locating/contracting supply, and delivery schedule/flexibility. Ninety-six percent of the Northern CA respondents stated that streamlined communication was "Very Important." Below we highlight several sources of transactions costs buyers indicated were important to their local food purchasing decisions.

Reliability

Growers and other local food suppliers may believe that because they are smaller and more individualized, buyers will allow more frequent supply disruptions or delays in delivery consistency. However, buyers in both surveys emphasized the importance of reliability, including for locally sourced products. All respondents from the Northern CA survey indicated that overall vendor reliability was either "Important" or "Very Important," with 96% categorizing this vendor attribute as "Very Important." Similarly, Sandhills NC respondents frequently cited consistency and ability to keep up with demand as an important component determining their satisfaction with their current suppliers, and reliability showed up on a list of concerns regarding sourcing local products.

The importance to buyers of year-round product availability was investigated in the Northern CA survey by asking respondents whether the quantities they needed exceeded the amount that the vendor could provide year-round. Responses were fairly evenly split, with 32% stating that this issue was "Not a Barrier," 24% stating that it was a "Minor Barrier," and 28% reporting it as a "Major Barrier." Responses were fairly evenly distributed within entity types as well, likely indicating that the importance of year-round availability is dependent on individual buyer needs rather than entity type. It is important to note that CA buyer responses to this question may be attenuated by the longer growing seasons (in some cases year round) in CA.

Flexible Product Quantities, Processing, and Packaging

When Sandhills respondents were asked whether there were factors or issues with their current produce supplier they would like to see changed, those who reported problems (11%) listed the availability of purchasing in split cases and purchasing in smaller sizes as primary complaints. Northern CA respondents also emphasized the need for vendor flexibility in this area, with 100% of buyers indicating that whether or not a vendor offered flexible product quantities was “Important” (40%) or “Very Important”(60%) to their sourcing decisions.

All Sandhills respondents reporting problems with their suppliers (11%) also cited flexible packaging as one of the specific things they would like their current suppliers to address. When Northern CA buyers were asked if the packaging offered by distributors was a barrier, a majority (63%) reported it was “Not a Barrier,” but 10% said it was a “Major Barrier,” nearly matching the share of Sandhills buyers reporting the problem.

A lack of commercial kitchen and other processing facilities is often discussed as a potential barrier limiting local food sales, but neither survey identified this as an important issue. Nearly half (48%) of Northern CA respondents identified additional light processing as “Not Important,” and 44% of participants rated vendor-provided manufacturing/packaging as “Not Important.” Over half (56%) of Northern CA respondents purchasing food products from distributors stated that a lack of processing services such as trimming, peeling, and prewashing was “Not a Barrier” to purchasing local foods.

Delivery

Frequency and ease of delivery was important to intermediated food buyers in both surveys. Sandhills NC hospitals and assisted living facilities reported using food service distributors that delivered from 1 - 4 times per week, and larger volume resort respondents required deliveries up to six days a week during peak season. Delivery schedules were designed to minimize the cost (e.g., time) of ordering and receiving their food products. Two-day delivery for standard produce items purchased on a weekly basis seemed to be acceptable to a majority of the respondents, but most respondents were currently able to receiving next day delivery if needed, a high priority especially for restaurants and catering businesses, where quick order turnaround provided the flexibility to make last-minute changes to menu’s or volumes. Delivery was cited as “Important” or “Very Important” to over half (60%) of the Northern CA buyers, and 100% of the Schools and Hospitals surveyed stated delivery was “Very Important,” likely due to a lack of transport capabilities.

One-stop Ordering/Shopping

When asked what they considered to be the greatest advantage of traditional sources of produce, Sandhills respondents highlighted ease of ordering, ability to have one-stop

shopping, consistency of supply, and year round availability. Northern CA buyers were asked about the importance of one-stop shopping in their purchasing decisions, and results were fairly evenly distributed: 36% indicating “Not Important,” 28% “Important,” and 36% “Very Important.”

Food Safety Requirements

The Food Safety Modernization Act of 2011 represented the first overhaul of the United States’ food safety laws in over 70 years, and mandates increased grower food safety reporting and certification activities. For small- and medium-sized farmers, food safety risk-reduction requirements set by intermediary buyers can represent a significant, and often prohibitive, barrier to sales (Iles & Marsh, 2012), and third party certification that includes required implementation and training is too costly for some small- and medium-sized farmers (Hatanaka, Bain, & Busch, 2005).

The potential for food safety requirements to act as a barrier to local food sales was evident in both studies, with buyers indicating that they believe food safety is an important consideration. California respondents exhibited similar attitudes about the importance of food safety across entity types, with 80% of all respondents identifying a vendor having documented food safety practices/certification as being “Very Important,” and 100% of schools, specialty retail stores, and hospitals reported it as “Very Important.” Only 8% of Northern CA respondents reported that documented food safety practices were “Not Important.” For public sector institutions in the Sandhills region, such as the detention center, hospitals, and schools, documentation of food safety practices was the main obstacle to sourcing local food items. Restaurants tended to place the least amount of emphasis on food safety documentation.

Despite the stated importance of food safety to buyers, very few in either region required documentation of food safety practices from vendors, especially when purchasing directly from growers. Only 11% of Sandhills respondents, including several public sector institutions and restaurants, required documentation of food safety practices from suppliers. In the Northern CA survey, 32% and 8% of buyers required documentation from distributors and growers, respectively.

Conclusion and Future Research

Strong and growing consumer interest in local foods is leading to growth in local food sales, and much of the growth is taking place in intermediated market channels that can accommodate larger volume transactions (Low, et al, 2015). While significant attention has been paid to understanding barriers limiting local food sales from the perspective of growers and distributors, relatively less research has focused on barriers from the perspective of intermediated buyers such as restaurants and institutions.

This paper presents data collected in two geographically distinct surveys conducted in rural Northern California and the Sandhills region of North Carolina. While designed to answer similar research questions, the surveys were not identical, prohibiting direct comparisons and

aggregation within buyer categories in most cases. In addition, sample sizes within buyer categories were too small to allow for statistical analysis. Accordingly, the results of this study are not intended to do more than provide initial insights and guide future research in a developing area of study.

Despite distinct differences in buyer types and access to local foods, there were notable similarities between buyers in the two survey areas. Buyer attitudes toward local foods were favorable in both regions, and buyers of all types consistently confirmed that transactions costs play a central role in local food purchasing decisions. Ease, frequency, and consistency of product ordering and delivery emerged as centrally important to buyer purchasing decisions. To continue to grow, local and regional food systems will likely need to provide intermediary buyers with services and efficiencies similar to those provided by their current vendors. Further research into how various types of transactions costs differentially affect buyer purchasing decisions could help inform the development of emerging locally focused coordination and distribution businesses (e.g., food hubs).

Despite marked differences in access to local food, buyers in both the Sandhills and Northern CA regions held positive attitudes toward increased local purchasing. Further research is needed to help policy makers interested in developing local food systems understand how intermediary buyer interest in local food purchasing is correlated with local food availability.

Intermediary buyers may be willing to incur higher transactions costs to purchase local food if they expect to receive a price premium from end consumers, but may also base decisions on personal preferences. Additional research is needed to determine how the personal preferences of intermediary food business owners drive their decisions to purchase local food.

Buyers in both regions recognized the importance of food safety, but relatively few required documentation of food safety practices, especially when buying directly from growers. As the volume of local food sales continue to grow in intermediated markets and the Food Safety Modernization Act of 2011 is implemented over the next several years, large changes in intermediary buyer food safety requirements are possible, and these changes could significantly impact small- and medium-size food businesses (e.g., farms, local distribution businesses). To anticipate potential impacts of policy and market changes, further research is needed to understand the primary drivers of buyer decisions to require (or not require) documentation of food safety practices.

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