From Farm to Fork?
An Empirical Investigation of the Challenges Faced by North Carolina’s Small Meatpackers

by

Tina Prevatte

A Master’s Project submitted to the faculty of the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Master of City and Regional Planning in the Department of City and Regional Planning.

Chapel Hill

Spring 2009

Approved by:

______________________________
ADVISOR

______________________________
READER
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Chapter 1: Introduction to the Research Question

Rising concerns about the effects of industrialization and concentration within our globalized food economy have resulted in increased consumer demand for locally, sustainably produced foods. There is a vocal and growing subset of consumers who are taking a hard look at the food they consume, its origins, and how their food choices reflect their personal values. Food safety scares and environmental and health concerns have many Americans thinking critically about the sources of their food and how it is produced and processed. In fact, according to recent market research 70% of U.S. consumers want to know where their food comes from and would pay more for local food if they could find it (Packaged Facts, 2007).

Developing alternative local food systems to meet this growing demand is a potential economic development strategy. Local food is now an estimated $5 billion industry, and expected to grow to $7 billion by 2011 (Packaged Facts, 2007). Communities that promote and develop markets for sustainable local foods not only have the potential to benefit from improved nutrition and environmental practices, but also to generate additional jobs through value-added product development. Knowing this, planners and sustainable agriculture activists throughout the U.S. are seeking ways to tap into and support the economic development potential of their local food system. However, as this work is undertaken, a number of challenges arise.

Most regions lack the policy supports and infrastructure necessary for local food systems to flourish. Even when these supports are in place and resources are secured, competing in the marketplace against large and globalized food companies can be extremely difficult. The industrialization and concentration that has happened within our food economy over the last
several decades facilitates extreme economies of scale that allow companies to get products to market with great efficiency. Consumer expectations for what foods cost are set by these companies. And the power of retailers and distributors within food supply chains is enormous. Therefore, successfully introducing local and sustainably produced foods to the marketplace demands innovative new business models and a sophisticated approach to marketing and sales. In many ways the economic viability of local food systems remains unproven. What is clear is that developing and executing entrepreneurial solutions that allow small to mid-scale farmers practicing sustainable agriculture to consistently access their local markets in a way that is financially viable for all involved can be extremely challenging.

For those committed to the growth and development of local food systems, meat products\(^1\) present a unique set of challenges and opportunities. One of the most significant barriers to expanding growth in local, sustainable meat production and markets is limited access to quality meat processing\(^2\), particularly value-added processing. As consolidation has occurred within the meatpacking industry, small meatpackers\(^3\) have gradually disappeared. Those that continue to operate often face significant obstacles. Small-scale meat processing is therefore a missing or weak link in local food value chains across the country. Without this link, small to mid-size farmers are unable to access local markets such as restaurants and grocery stores, and cannot optimize their profits by eliminating waste and utilizing entire animals rather than just select parts.

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\(^1\) For the purpose of this project, meat is defined as beef, pork, and chicken.
\(^2\) Meat processing refers to the entire spectrum of services from slaughter to the production of value-added products such as smoked ham, ground beef, or sausage.
\(^3\) “Small meatpacker” refers to both very small and small livestock packing plants. The USDA’s Food Safety Inspection Service defines a very small packing plant as one with fewer than 10 employees or less than $2.5 million in annual sales, and a small packing plant as one with 10-499 employees (FSIS, 1996).
One might expect that small meatpackers would be well positioned to serve growing markets for local, niche meat products. However, this is not usually the case. There are a number of possible explanations why. Conventional wisdom suggests that there are structural characteristics within the modern meat industry that explain the challenges facing small meatpackers, as well as federal laws and regulations that put small processors at a disadvantage (Petersen, 2005). In addition, it is widely assumed that finding and retaining capable labor and training employees can be very challenging for small meatpackers, and that lack of access to capital and limited business skills are also pervasive problems within the sector (NMPAN, 2008). Still, very little empirical work has been done to determine the actual obstacles and constraints facing small meatpackers across the country. Research is needed to better measure and understand regional challenges within the sector and to develop policy options for removing barriers to a local meat economy.

North Carolina is better off than many states in terms of the access that small to mid-size farmers have to small meatpackers. Staff of North Carolina Cooperative Extension and the North Carolina Department of Agriculture & Consumer Services (NCDA&CS) maintain a directory of the small meatpackers in the state who have expressed a willingness to serve small to mid-size farmers seeking access to local markets. There are currently twenty small meatpackers listed in this directory. However, in spite of the existence of these willing small meatpackers, small-scale meatpacking is still viewed as a bottleneck by those working to rebuild the state’s local food economy.

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4 The “Independent Farmers’ Directory of Slaughter Facilities in North Carolina” is a document that identifies the small meatpackers in the state willing and able to serve small to mid-size independent farmers seeking access to local markets. It was originally published in November 2004 by Mike Lanier, a NC Cooperative Extension Agent based in Orange County, and was updated and published again in July 2007. The directory was compiled by first working with staff of the North Carolina Department of Agriculture and Consumers Services to determine which slaughter and processing facilities were candidates for serving independent producers seeking to sell their meat products in local markets, and then contacting each of these candidates to determine their willingness to work with these producers.
This paper provides a critical examination of the current barriers and challenges to integrating this set of small meatpackers who are willing and able to work with small to mid-size farmers as more viable links in North Carolina’s local meats value chain. It serves as a regionally specific test of conventional wisdom regarding the challenges faced by small meatpackers, and sheds light on how these challenges can cause even the most committed small meatpackers to function as bottlenecks within their local food system.

In addition to identifying the most significant challenges faced by this set of small meatpackers, this paper reveals what they view as their greatest opportunities, and offers a set of specific recommendations for potential institutional and other solutions to address these challenges and opportunities. It is my hope that this master’s project will serve as a guide to any policy changes or other next steps necessary to develop North Carolina’s small scale meat processing infrastructure into a more viable and dynamic aspect of the state’s local food economy, and as a sort of reality check on whether or not this is a realistic or desirable goal. In contributing an empirical study of the regional needs of a set of small meatpackers it is my intention that my findings and recommendations will offer transferable insights to planners and sustainable agriculture activists seeking to build viable local meats value chains in other regions throughout the country.

The findings presented in this paper are drawn from the results of a survey administered to the twenty small meatpackers in North Carolina identified in the “Independent Farmers’ Directory of Slaughter Facilities in North Carolina”. These packers were selected as the focus of this research project because their expressed interest in working with small to mid-size farmers
makes their perspective as potential links in a dynamic local meats value chain particularly valuable. The survey distributed to them has been designed to identify the challenges faced by North Carolina’s small meatpackers and to assess local attitudes and interests within the sector. A copy of this survey can be found in Appendix A.

In person interviews were also conducted with a subset of the identified packers, during which the survey questions were asked, tours of meatpacking facilities were given, and in depth discussions were had with facility owners in regard to the history and operations of their business. This subset was selected as a representative sample of the diversity of small meatpackers in the state that are currently working with small to mid-size farmers to access local markets. Interviews were also conducted with a set of institutional and industry stakeholders who have regular interactions with North Carolina’s small meatpackers. Further details on survey and interview methodology are provided in Chapter 4.

The remainder of this paper is organized into four chapters. Chapter 2 provides a review of the literature that this research project is informed by and in conversation with. It outlines the history and trajectory of consolidation in the meatpacking sector, and provides a summary of conventional wisdom regarding the challenges currently faced by small meatpackers. Chapter 3 provides an overview of the meatpacking sector in North Carolina, revealing why the state is a particularly interesting place in which to examine the challenges and opportunities of small meatpackers. The findings of this research project are detailed in Chapter 4, where I divide and rank the challenges facing North Carolina’s small meatpackers.

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5 I received assistance with my survey design from Arion Thiboumery and Lauren Gwin, Project Coordinators for the Niche Meat Processor Assistance Network, a national network of people and organizations assisting niche meat processors and the livestock producers and niche meat buyers who depend on them.
into six categories: workforce, regulation, access to capital, marketing and sales, business planning and management, and waste disposal. The final chapter offers a set of recommendations and a conclusion based a critical analysis of these findings, suggesting that while there are currently a number of resources available to support North Carolina’s small meatpackers, more proactive strategies are needed to fully leverage these resources. The conclusion to this paper also asserts that, in conversation with other findings, the existence of excess capacity amongst the packers surveyed for this research project suggests that addressing key challenges within the sector could result in a more viable and dynamic local meats value chain.
Chapter 2: Literature Review

This chapter provides background information critical to understanding the historic and current context in which small meatpackers operate. It engages with a body of literature that provides an in depth and critical view of concentration and consolidation within the U.S. meatpacking industry, and its effects. For the purposes of this research project, the most notable of these effects is reduced access to markets for small to mid-size farmers producing livestock, and strong competitive pressures for small meatpackers. These two effects are deeply intertwined, as small to mid-size farmers rely on small meatpackers to access local markets. Sustainable agriculture activists and others interested in removing barriers to the growth and development of local food systems are therefore beginning to examine the challenges faced by small meatpackers, and the ways in which they might support and rebuild the sector. This chapter also provides a summary of the conventional wisdom and initial research findings that have emerged from this work. In Chapter 5, I put these more general findings about the challenges facing small meatpackers into conversation with my own research findings, which provide a more focused examination of specific regional challenges for a set of small meatpackers with an expressed interest in working with small to mid-size farmers.

Concentration and Consolidation In U.S. Meatpacking

The meatpacking industry in the U.S. is intensively concentrated, with just four large packing companies controlling 81% of the beef market, 59% of the pork market, and 50% of the poultry market (Stull & Broadway, 2004). This is a contemporary development however, and historically was not always the case. U.S. meatpacking has dramatically transformed over the
course of the last thirty years. Far fewer meatpackers now slaughter livestock than was the case in the late seventies, and their plants are much larger.\(^6\)

Firm concentration ratios are a way of measuring the share of an industry’s output held by the four largest producers in that industry. Changes in these ratios are widely used as summary indicators of structural change. Using Census Bureau data, the table below reports firm concentration ratios over time for the slaughter of cattle, hogs, and chickens.

<table>
<thead>
<tr>
<th>Year</th>
<th>Cattle</th>
<th>Hogs</th>
<th>Chickens</th>
</tr>
</thead>
<tbody>
<tr>
<td>1963</td>
<td>26</td>
<td>33</td>
<td>14</td>
</tr>
<tr>
<td>1967</td>
<td>26</td>
<td>30</td>
<td>23</td>
</tr>
<tr>
<td>1972</td>
<td>30</td>
<td>32</td>
<td>18</td>
</tr>
<tr>
<td>1977</td>
<td>25</td>
<td>31</td>
<td>22</td>
</tr>
<tr>
<td>1982</td>
<td>44</td>
<td>31</td>
<td>32</td>
</tr>
<tr>
<td>1987</td>
<td>58</td>
<td>30</td>
<td>42</td>
</tr>
<tr>
<td>1992</td>
<td>71</td>
<td>43</td>
<td>41</td>
</tr>
</tbody>
</table>

Source: Longitudinal Research Database, U.S. Bureau of the Census (MacDonald et al, 2000)

Firm concentration in cattle slaughter remained fairly stable from 1963 through 1977, but then rose sharply from 25% in 1977 to 71% in 1992. Such a change in concentration is quite unique. According to Census Bureau data no other industry has shown such a dramatic increase in any fifteen-year period (MacDonald et al, 2000). Concentration in hog slaughter remained stable until 1987, but then increased significantly between 1987 and 1992. After a sharp rise in concentration between 1977 and 1987 chicken slaughter has remained stable.

As these changes in concentration were occurring, the number of total meatpacking plants in the U.S. was shrinking while the plants themselves were increasing in size. From 1976 to 1996, the number of federally inspected cattle plants fell by more than half, from 1655 to 812. The number of federally inspected hog plants fell from 1322 in 1976 to 770 in 1996 (Levy,

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\(^6\) For the purposes of this paper, consolidation is defined as the shift towards production in a few large facilities, and concentration is defined as the move towards fewer companies being in ownership of these facilities.
2001). During this same period the percent of animals being slaughtered in large plants increased dramatically. While notions of “large” have changed over time, the largest cattle plants slaughter more than half a million cattle in a year and large hog plants slaughter more than a million. The Census Bureau defines large plants as those with at least 400 employees.

Table 2: Share of Industry Value of Shipments in Large Plants

<table>
<thead>
<tr>
<th>Year</th>
<th>Cattle</th>
<th>Hogs</th>
<th>Chicken</th>
</tr>
</thead>
<tbody>
<tr>
<td>1963</td>
<td>31</td>
<td>66</td>
<td>ND</td>
</tr>
<tr>
<td>1967</td>
<td>29</td>
<td>63</td>
<td>29</td>
</tr>
<tr>
<td>1972</td>
<td>32</td>
<td>62</td>
<td>34</td>
</tr>
<tr>
<td>1977</td>
<td>37</td>
<td>67</td>
<td>45</td>
</tr>
<tr>
<td>1982</td>
<td>51</td>
<td>67</td>
<td>65</td>
</tr>
<tr>
<td>1987</td>
<td>58</td>
<td>72</td>
<td>76</td>
</tr>
<tr>
<td>1992</td>
<td>72</td>
<td>86</td>
<td>88</td>
</tr>
</tbody>
</table>

Source: Longitudinal Research Database, U.S. Bureau of the Census (MacDonald et al, 2000)

The emergence of large plants demonstrated in the table above is quite striking. In 1963, only 31% of all cattle slaughter occurred in large plants. But by 1992 plants in that category slaughtered 72% of cattle. In hog slaughter, large plants handled 66% of all slaughter in 1963, but 86% by 1992. And in chicken slaughter large plants went from handling 29% of all slaughter in 1967 to 88% in 1992. Consolidations on such a dramatic and rapid scale are quite rare in U.S. manufacturing (MacDonald et al, 2000).

One particularly interesting pattern stands out when considering the concentration and consolidation data presented above. All three slaughter industries experienced dramatic consolidation. However, it was only in cattle slaughter that this consolidation led to dramatic concentration. Patterns of meat consumption likely played a role here. Per capita poultry consumption has grown sharply in the United States over the last few decades, while per capita pork consumption has grown modestly and beef consumption has declined (MacDonald et al,
These dynamics remind us that meatpacking plants do not operate in a vacuum, but in conjunction with both meat buyers and livestock suppliers.

Indeed, the location and operations of livestock suppliers affect the optimal location, scale, and operations of slaughter plants. Concentration and consolidation in meatpacking is intimately linked to similar trends in the production of livestock. Large cattle feedlots and hog and chicken farms account for high and growing shares of livestock sales. There has been a shift toward larger production establishments and toward long-term contractual arrangements between these suppliers and slaughter (MacDonald et al, 2000). To achieve the economies of scale they promise, large plants need large suppliers. By building a large slaughter plant among a network of large farms or feedlots, and forming long-term relationships with those suppliers, plant managers can ensure a steady supply of animals and exercise tight control over on-farm decisions. They are therefore able to maintain high capacity utilization throughout the year, and mitigate the risks associated with building and operating large facilities.

Given that just four large packing companies control the vast majority of beef, pork, and poultry markets, it is not surprising that many small to mid-size farmers feel shut out of the marketplace by the preference that these large packers have for working with large suppliers. The current imbalance of power and influence in meat processing has been compared to an hour glass, in which a small group of powerful corporations act as the conduit between thousands of livestock suppliers and millions of consumers (Harper et al, 2003). This metaphor attempts to provide a visual image of the control these firms have. However, it ignores the current push towards a bifurcated system.

*Per capita beef consumption dropped from 84.7 pounds per person in 1975 to 66.3 pounds per person by 1995.*
It is true that small to mid-size farmers often have very few options for accessing markets, and that consumers have limited options in terms of the quality and origins of the meats they purchase. However, small meatpackers can and do play an important role in helping small to mid-size farmers to access local and niche markets for meat products. Often this is achieved through “co-packing” agreements, where farmers work with processors on a fee-for-service basis to cut and package their livestock, then sell the meat directly to consumers. When a small meatpacker is available in reasonable proximity to their operations and willing to work with them, small to mid-size farmers may be able to participate in direct markets such as farmer’s markets or meat buying clubs. Alternatively, these farmers can sometimes sell their animals directly to small meatpackers who then process and package meat products for their own wholesale and distribution business.

The following section provides an examination of obstacles and constraints facing small meatpackers across the country. It sheds light on how these challenges can limit their ability to serve farmers and to otherwise remain competitive in the marketplace. I have focused this research project on a set of small meatpackers who have an expressed interest in working with small to mid-size farmers. In doing so, I attempt to make a specific contribution to the body of work referenced below. I aim to provide insight into how the challenges facing small meatpackers can cause even those committed to acting as links between family farms and local markets to function as bottlenecks within their local food system. By shedding light on some of the challenges faced by these packers I hope to assist institutions in developing programs that support these packers, and that demonstrate the market opportunity for local, niche meat products to small meatpackers not yet committed to working with small to mid-size farmers.
Challenges Facing Small Meatpackers

Because of the potential role that small meatpackers play in providing small to mid-size farmers access to markets, a variety of stakeholders have begun to examine the sector. As a result of these examinations a body of conventional wisdom has emerged in regard to challenges facing small meatpackers. Anecdotal accounts from small to mid-size farmers suggest difficulty in finding and working with these packers. And data gathered during recent empirical investigations by non-profit and industry groups indicates that the few small meatpackers who continue to operate face significant obstacles. Below I provide a summary of the initial research findings regarding the challenges faced by small meatpackers, and outline some of the competitive pressures they face as a result of the structural changes outlined above.

The Niche Meat Processor Assistance Network (NMPAN) is one group that has been working to identify and address the challenges faced by small meatpackers. This group has identified five critical need areas for the sector: 1) assistance with understanding regulation; 2) finding and retaining capable and willing labor, and training employees; 3) business planning and management; 4) communication with both customers and regulators; and 5) access to capital (NMPAN, 2008).

During the course of their work NMPAN has found that the most frequently cited challenges for small packers concern their workforce. Meat cutters at small packing facilities have been found to have an average of between nine and twenty-five years of experience, indicating that young people are not entering the sector. There are a number of opinions about why this might be the case. One of the most common is that there is a lack of monetary
incentive for entry into the industry. Those that are entering are typically trained on the job. Due to the difficulties they face finding capable labor most small meatpackers have very few qualifications for new hires. They seek employees with adequate physical strength as well as good coordination, depth perception, and color recognition (Martin & Lawson, 2005). This has notable implications for the quality of work that can be performed by small packers, as well as their ability to innovate and experiment with new services and product development.

In spite of their resource constraints, small meatpackers are subject to the same set of regulations that large meatpacking facilities face. A recent discussion paper produced for the Sustainable Agriculture Coalition by Hilde Petersen identifies a number of challenges small packers face as a result of this situation. Petersen explains that considering the vast differences in their operations, regulating small and large packing facilities the same causes a number of disadvantages for small meatpackers. Specifically, it is believed that the introduction of the Pathogen Reduction/Hazard Analysis Critical Control Point (HACCP) landmark rule in 1996 introduced disproportionate burdens for small meatpackers (Petersen, 2005). Some stakeholders have argued that systematic cost differentials were built into the design of HACCP. In fact, a 2001 report by the Economic Resource Service formally acknowledged disproportionate costs in the implementation of HACCP which hamper the ability of small meatpackers to afford the proper facilities, equipment and technology required for compliance (ERS, 2001). Anecdotally, the costs associated with meeting structural requirements outlined in regulations leave many small processors without the capital required to maintain their facilities or to buy the equipment needed to comply with those regulations. In addition, complicated HACCP protocols have made compliance with federal meat inspection laws extremely resource
intensive and burdensome, contributing to the loss of small meatpacking plants and hindering new product development in those that continue to operate.

Petersen also points out that increased costs and operational burdens are not the only challenges linked to regulations. In recent testimony before the Small Business Administration, leadership of the American Association of Meat Processors claimed that small plants are frequently subject to particularly strict enforcement by the USDA’s Food Safety Inspection Service (Petersen, 2005). This is an allegation that is frequently repeated. Stakeholders feel that small plants are often subject to more thorough inspection than large plants due to fundamental differences in processing design. Concerns have also been expressed about unwarranted intimidation by federal inspectors aimed explicitly at small meatpackers. It is alleged that inconsistent and unbalanced bureaucracy is creating reluctance by small meatpackers to seek USDA certification.

In many parts of the country USDA certification is the only option available for small meatpackers who want to participate in commerce. However some states have their own state inspection programs. Where it exists, state-inspected processing is believed to be advantageous. State inspection programs are thought to be more easily adapted to the needs of small businesses. Therefore, states that have maintained their inspection programs are thought to play a critical role in assisting the small processors frequently left behind in the federal system (Petersen, 2005). State systems are generally more accessible and flexible in providing resources to small meatpackers, and are able to provide for their diverse and individual needs. It is widely believed that state inspection programs are integral to the success of small meatpackers and must be developed and supported in all states.
By virtue of their scale, small meatpackers generate higher operating costs per unit at almost every level, and struggle to perform at the same efficiencies as their industrialized large-scale counterparts. In addition, the sale of by-products, where the majority of profits are made for large processors, is not viable for small plants (Clause et al, 2003). Small plants often do not have sufficient quantity or the resources to render their own byproducts, and therefore face the cost of disposal. The ability to successfully dispose of slaughter and processing byproducts in a cost effective manor can be a factor in determining the success or failure of small meatpackers (Martin & Lawson, 2005).

In general, small plants producing commodity products face stiff cost pressures, causing some to exit the industry. However, small plants producing specialty or niche meat products have pricing flexibility and therefore may not be as affected by the increased costs of doing business that accompany their scale (ERS, 2001). Innovation and differentiation of product have allowed a small number of small meatpackers to stay afloat serving growing markets for niche meat products. The importance of innovation and differentiation to the survival of small meatpackers suggests that interventions to support the sector should focus on identifying and understanding factors that inhibit firms from innovating in particular environments. This research project attempts to identify such factors for a specific set of small meatpackers in North Carolina, and makes recommendations for how the state’s institutional and other resources might be directed to address these localized challenges.
Chapter 3: Overview of North Carolina’s Meatpacking Sector

North Carolina is known for agro-industrial livestock production. The state is home to the world’s largest hog processing plant and one of the country’s largest poultry slaughterhouses. According to the 2007 Census of Agriculture the total market value of agricultural products in North Carolina was just over $10.3 billion. Of that, livestock sales comprised approximately $7.7 billion, or nearly seventy-five percent. Historically, tobacco was the cornerstone of the state’s agricultural activity. But over the last few decades North Carolina’s agricultural economy has undergone dramatic changes, and livestock has gained prominence. Figure 1 below illustrates this shift away from tobacco and towards the production of livestock, specifically hogs and poultry. North Carolina currently ranks second in the nation in hog production and fifth in production of broilers (NASS, 2008).

Figure 1: Market Value of NC Agricultural Products

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8 Smithfield Packing Company owns the world’s largest hog processing facility, which is located in the Bladen County town of Tar Heel, and processes up to 32,000 hogs per day (Geary & Sorg, 2007). The House of Raeford Farms, Inc. facility located in the Hoke County town of Raeford is one of the country’s largest poultry slaughterhouses.

9 A broiler is a type of chicken or turkey raised specifically for meat production.

10 This chart was constructed using USDA Census of Agriculture data. All values were adjusted to 2007 dollars using the BLS inflation calculator available at [http://data.bls.gov/cgi-bin/cpicalc.pl](http://data.bls.gov/cgi-bin/cpicalc.pl).
These shifts in agricultural activity have been accompanied by farm losses, farm consolidation, and concentration of farm ownership. Between 2003 and 2006 North Carolina lost over 5500 farms. In 2004 and 2005 alone, the state lost over 4,000 farms, putting it top in the nation for farm losses along with Florida and Tennessee (NCDA&CS, 2007). Despite these striking farm losses, agricultural revenues in the North Carolina have remained relatively constant (NASS, 2008). These contradictory trends suggest that large farms are expanding in the state, gradually subsuming small and mid-size farms. As the table below reveals, the average farm size in North Carolina has indeed steadily increased over the past several years, as has the percentage or farmland controlled by large farms.

<table>
<thead>
<tr>
<th>Year</th>
<th># of Farms (Thousands)</th>
<th>Ave. Farm Size (Acres)</th>
<th>$1000-$9999</th>
<th>$10,000-$99,999 (Thousand Acres)</th>
<th>$100,000+</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>53.5</td>
<td>170</td>
<td>2300</td>
<td>2000</td>
<td>4800</td>
</tr>
<tr>
<td>2004</td>
<td>52.0</td>
<td>173</td>
<td>2200</td>
<td>1950</td>
<td>4850</td>
</tr>
<tr>
<td>2005</td>
<td>49.0</td>
<td>180</td>
<td>2000</td>
<td>1750</td>
<td>5050</td>
</tr>
<tr>
<td>2006</td>
<td>48.0</td>
<td>183</td>
<td>1950</td>
<td>1750</td>
<td>5100</td>
</tr>
<tr>
<td>2007</td>
<td>48.0</td>
<td>183</td>
<td>1930</td>
<td>1730</td>
<td>5140</td>
</tr>
</tbody>
</table>

Source: North Carolina Agricultural Statistics 2008

As noted previously, the location and operations of livestock suppliers affects the optimal location, scale, and operations of slaughter plants. Thus, growth and consolidation in poultry and hog farming here in North Carolina has been intimately linked to growth and consolidation within the state’s meatpacking sector. Much of the dramatic transformation of the U.S. meatpacking industry detailed in the previous chapter has been played out in north Carolina. In 2007, more than eleven million hogs were slaughtered in the state (NASS, 2008). Over 90% of
those were slaughtered by Smithfield Packing Company, which owns the vast majority of the state’s pork processing capacity (Geary & Sorg, 2007).

In light of these recent and dramatic structural changes, North Carolina is a particularly interesting place in which to examine challenges and opportunities faced by small meatpackers. Alongside some of the largest meatpacking facilities in the world run by global, vertically integrated corporations, mid-level packers continue to find their niche, and a set of small meatpackers are surviving with viable business models. While large farms and processing facilities most certainly dominate livestock markets in the state, there still remains a strong tradition of small and mid-sized family farms. And there are approximately twenty small meatpackers in North Carolina who have identified themselves as willing and able to help these farmers as they seek access to local markets (Lanier, 2007).

According to the 2007 Census of Agriculture, family farms account for 97% of all farms in North Carolina, and about 85% are classified as small family farms. While 96% of hog production in 2007 occurred on farms selling over 5,000 hogs, there were 927 farms that raised between 1 and 24 hogs. Of these, 59% reported sales of hogs, indicating there are approximately 500 farms raising and selling hogs on a very small scale in North Carolina. There were fewer farms selling hogs from mid-sized operations, with approximately 168 farms having inventories between 25 and 99 hogs and 137 farms raising between 100 and 1000 hogs per year (USDA, 2007).

Cattle production in North Carolina is notably different from hog production. Most of the cattle raised in the state are on farms with fewer than 50 cows. However, the majority of North Carolina cattle ranchers run stocker cattle operations. Once weaned their animals are fed for
three to four months on grass, then shipped to feedlots in the Midwest. As markets for grass-fed beef are growing, however, increasing numbers of the state’s ranchers are keeping their cattle in state for finishing and entry into local niche markets.

The productivity of North Carolina’s small and mid-sized farms is reflected by the growing number of direct markets for local foods in the state. There are currently over one hundred farmer’s markets listed in the Farmers Market Directory maintained by the NCDA&CS. In addition, North Carolina has approximately seventy CSAs, and more are created every year as interest from both consumers and farmers grows (NCCE, 2008). However, due to the bottleneck presented by the state’s small meatpackers, opportunities within these markets for small to mid-size farmers producing livestock are limited.

The table below outlines the various categories into which North Carolina’s meatpackers are divided.

<table>
<thead>
<tr>
<th>Plant Category</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>For Regulatory Purposes</td>
<td></td>
</tr>
<tr>
<td>Custom Plant</td>
<td>Products from these facilities cannot enter commerce. Inspected four times per year by NCDA&amp;CS staff for sanitation and proper labeling of product.</td>
</tr>
<tr>
<td>State Plant</td>
<td>Products from these facilities can enter intrastate commerce. Inspected daily by NCDA&amp;CS staff for disease, sanitation, and proper labeling of product.</td>
</tr>
<tr>
<td>TA Plant</td>
<td>Products from these facilities can enter interstate commerce or be exported to foreign countries. Inspected daily by NCDA&amp;CS staff for disease, sanitation, and proper labeling of product.</td>
</tr>
<tr>
<td>USDA Inspected Plant</td>
<td>Products from these facilities can enter interstate commerce or be exported to foreign countries. Inspected daily by USDA staff for disease, sanitation, and proper labeling of product.</td>
</tr>
<tr>
<td>By Size</td>
<td></td>
</tr>
<tr>
<td>Very Small</td>
<td>Fewer than 10 employees, or less than $2.5 million in annual sales.</td>
</tr>
<tr>
<td>Small</td>
<td>10-499 employees.</td>
</tr>
<tr>
<td>Large</td>
<td>500 or more employees.</td>
</tr>
</tbody>
</table>
For regulatory purposes, meatpackers in North Carolina are divided into four categories—Custom Plants, State Plants, TA\textsuperscript{11} Plants, and USDA Inspected Plants. The Meat and Poultry Inspection Division of the NCDA\&CS maintains lists of the meatpacking facilities that fall into these categories, and is charged with ensuring that the plants subject to North Carolina state inspection produce safe, wholesome, and properly labeled meat and poultry products (NCDA\&CS, 2009).

There are currently just under one hundred and ninety establishments operating under the jurisdiction of the NCDA\&CS. Of these, twenty-one are Custom Plants, seventy-four are State Plants, and ninety are TA Plants. Custom Plants are meatpacking facilities that slaughter and/or process meat, poultry and wild game for private individuals. Products produced in these facilities cannot enter commerce. They are marked “NOT FOR RESALE” and must be returned to the owner for their personal use. Some small to mid-size farmers are able to sell product using Custom Plants, but must do so by selling their livestock directly to consumers who then pay to have the animals processed. Custom Plants are inspected just four times per year, and only for sanitation and proper labeling of product.

In contrast, State Plants are inspected daily for disease, sanitation, and proper labeling of product. Products from these facilities can be sold anywhere within the state of North Carolina bearing a label that indicates they were "Inspected and Passed by N.C.D.A". TA Plants are also inspected daily for disease, sanitation, and proper labeling of product. However, products from these facilities bear a label indicating inspection by the USDA and may be shipped anywhere in the United States or exported to foreign countries. In terms of regulation, there is technically

\textsuperscript{11} “TA” refers to the Talmadge-Aiken Act of 1962, a law passed to help coordinate state and federal food safety guidelines. This law allows trained inspectors that are state employees to staff meatpacking plants with USDA inspection privileges.
no difference between a USDA Inspected Plant, a TA Plant, and a State Plant - only who is doing the inspection.\textsuperscript{12} TA Plants are inspected to USDA standards, but by staff who are NCDA&CS employees. And NCDA&CS standards for State Plants are identical to USDA standards. Therefore, the primary difference between a State Plant and TA Plant is the ability to participate in interstate commerce.\textsuperscript{13} State Plants and TA Plants may also slaughter and/or process custom exempt product including wild game if kept separate from inspected products.

In regard to size, there are three categories of meatpackers in North Carolina – very small, small, and large. The USDA’s Food Safety Inspection Service (FSIS) defines a very small packing plant as one with fewer than 10 employees or less than $2.5 million in annual sales, and a small packing plant as one with 10-499 employees (FSIS, 1996). All other plants are considered to be large. Of the approximately one hundred and ninety plants inspected by the NCDA&CS, eighty are very small and the remainder are small.

Clearly, to be a viable link capable of helping small to mid-size farmers to access local markets a plant has to be inspected regularly by either the USDA or the NCDA&CS. However, not all plants that are positioned to serve these farmers are willing to. Large packers are generally vertically integrated operations that work with a select set of large farmers under contract, maintaining control over the supply of animals they process. Mid-level packers work within their own market niche, and for the most part their business models involve contractual agreements with large farms or otherwise connect them to commodity markets for livestock. Even small packers can be hesitant to work with small to mid-size farmers, preferring contracts

\textsuperscript{12} It is important to note that not all states have state inspection programs, and that the Talmadge-Aiken act does not apply in all states. Only 27 state governments run their own meat and poultry inspection programs (MPIs). And the Talmadge-Aiken act allows the USDA to contract with state agency inspectors to conduct federal inspection activities in only 10 states. State MPIs agree to meet standards “at least equal to” those of the federal standards set forth in the Federal Meat Inspection Act (FSIS, 2009).

\textsuperscript{13} The 2008 Farm Bill proposed interstate commerce for state-inspected plants. As of March 2009, the NCDA&CS had not yet received any requests to adopt this proposed change.
with local brokers as a way of insuring a consistent flow of product through their facilities. However, as noted earlier, there are approximately twenty small meatpackers in North Carolina who have identified themselves as willing to serve small to mid-size farmers seeking access to local markets (Lanier, 2007).

Small meatpackers in North Carolina are mostly family businesses that have been in operation for several decades. They have witnessed firsthand the consolidation in U.S. meatpacking, and have had to change their business strategies with the changing landscape of livestock production. Whereas most once had viable business models working only with small to mid-size farmers, they now find themselves acting largely as important gap fillers for the state’s large scale contract farmers, buying and creating markets for cull pigs\(^{14}\), and providing services to regional brokers operating within commodity markets for livestock. Due to the historic location of their inputs, the majority of North Carolina’s small meatpackers are located in rural areas. Very few are in close proximity to North Carolina’s population centers. The map included in Appendix B indicates the locations of the twenty small meatpackers on whom this research project is focused. These packers are spread fairly evenly throughout the state, though somewhat concentrated in the central and eastern regions. All are located in rural communities.

There are a number of institutions that work to support North Carolina’s meatpacking sector. The table that follows identifies these institutions and their respective support roles.

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\(^{14}\) Cull pigs or “slow growers” are animals raised by large contract farmers that do not meet the specifications set by large packing companies.
Table 5: Institutions that Support NC’s Meatpacking Sector

<table>
<thead>
<tr>
<th>Institution</th>
<th>Support Role</th>
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| NCDA&CS’s Meat and Poultry Inspection Division             | Provides technical assistance with:
|                                                            | • preparation of plans and specifications for new plants or plant upgrades
|                                                            | • preparation of HACCP Plans
|                                                            | • requirements for product labels
|                                                            | • requirements for equipment and utensils
|                                                            | • identification of equipment suppliers |
| NCSU’s Department of Food Science                          | Staffs a Meat Extension Specialist who assists with:
|                                                            | • interpretation of regulations
|                                                            | • resolution of compliance problems
|                                                            | • product development |
| North Carolina Meat Processors Association                 | Establishes a collective voice for small and very small packers, and facilitates communication and education within the industry. |
| NC Choices                                                 | Connects very small packers to technical training and collaborative business opportunities. |

It has already been noted that the Meat and Poultry Inspection Division of the NCDA&CS is actively engaged with the state’s meatpackers. The agency enforces state and federal laws to ensure that meat and poultry plants subject to North Carolina state inspection produce safe, wholesome, and properly labeled meat and poultry products. In addition, the NCDA&CS provides a range of technical assistance to the sector, particularly to small and very small packers with limited resources. They assist with the preparation of plans and specifications for new plants or plant upgrades, and with the development of HACCP Plans. They also provide education and training on requirements for product labels and processing equipment and utensils, and maintain lists of equipment suppliers. Senior managers within the Meat and Poultry Inspection Division do considerable outreach with a variety of agri-business stakeholders in the state. And they have demonstrated support for developing regulatory and other solutions that are responsive to the needs of small to mid-size farmers and local food system enterprises.
North Carolina State University’s (NCSU) Department of Food Science is home to a Meat Extension Specialist who provides extensive technical assistance to the sector. This individual works regularly with packers of all sizes, helping with interpretation of regulations, and providing scientific backing and supporting documentation for the resolution of compliance problems encountered. He also assists packers with new product development. In addition, he works with both state and federal regulators, educating them about key concepts in food science so that they can better interpret and enforce regulations.

The North Carolina Meat Processors Association (NCMPA) is a non-profit that was established to promote, develop, and maintain the advancement of the state’s meat processing industry. Their membership is comprised mostly of packers in the mid-level niche, though a few small packers are involved, and close relationships are maintained with some of the large packers in the state. Meatpacking is one of the most highly regulated industries. As such, the organization is important to establishing a collective voice for some of the state’s less powerful packers and to facilitating communication with the NCDA&CS, the North Carolina Agribusiness Council, and important industry allies such as the National Renderers Association. NCMPA holds two educational meetings annually, during which members convene to discuss the most pressing issues facing the sector.

NC Choices, a project of the Center for Environmental Farming Systems (CEFS)\(^\text{15}\), is actively working to transform the local meats value chain in North Carolina into one that equitably and effectively serves small to mid-size farmers, small-scale processors, and consumers. The organization’s overarching mission is to increase consumer access to healthy

\(^{15}\) CEFS was established in 1994 by North Carolina State University, North Carolina A&T University, and the North Carolina Department of Agriculture and Consumer Services. The organization’s stated mission is to develop and promote food and farming systems that protect the environment, strengthen local communities, and provide economic opportunities in North Carolina and beyond (CEFS, 2008).
food choices raised or grown locally and sustainably, provide new market opportunities for small and mid-sized farmers, and support the growth of local food economies. In order to fulfill this mission, NC Choices has done extensive outreach to small meatpackers in North Carolina. They recently initiated a pilot project involving the state’s largest natural foods co-op and two small meatpackers. This project has resulted in consistent weekly sales of local beef and pork that is produced sustainably on family farms. NC Choices intends to scale up this pilot, and to play an increasing role in providing small meatpackers with technical training and collaborative business opportunities.
Chapter 4: Survey and Interview Findings

A primary objective of this research project has been to identify the challenges faced by a specific set of small meatpackers in North Carolina. Another goal has been to assess local attitudes and interests within the sector in regard to serving small to mid-size farmers seeking access to local markets. In order to meet these objectives, a survey was administered to the set of twenty small meatpackers identified in the most recently published “Independent Farmers’ Directory of Slaughter Facilities in North Carolina”. These packers were selected as the focus of this research project because their expressed interest in working with small to mid-size farmers makes their perspective as potential links in a dynamic local meats value chain particularly valuable.

The survey distributed to these small meatpackers asks a set of questions to capture various aspects of their business operations, including what services they provide, the species and volume of animals currently moving through their facility, and their capacity to handle increased input. Respondents are also asked about their workforce, their regulatory status, and the types of technical assistance or support they have or would like to receive. In addition, a number of open-ended questions are included in the survey, asking respondents to identify their biggest challenges and opportunities, and to indicate their level of interest in collaborating with other small meatpackers. The full text of this survey is included in Appendix A.

In order to ensure a high response rate I initially contacted all twenty target respondents by phone, explaining who I was and the purpose of my research. One phone number had been disconnected, and another was never answered. Fourteen of the target respondents reached were asked if they would be willing to complete a survey in support of my work. They were
told they could complete the survey over the phone, electronically, or have it mailed to them.

None of these potential respondents were willing to complete the survey over the phone. Only three were capable of filling it out electronically. Six asked to have it mailed to them, and five asked to have it faxed to them. Of the three surveys distributed electronically only one was completed. Of the six surveys that were mailed with self-addressed return envelopes, two were returned. No responses were received to the surveys that were faxed.

Four of the target respondents reached were asked if they were willing to be interviewed in person at their facility. All four indicated that they were and interviews were scheduled at their convenience. These four targets for in person interviews were not chosen randomly, but selected as a representative sample of the diversity of small meatpackers in the state that are currently working with small to mid-size farmers. During these interviews survey questions were asked, tours of meatpacking facilities were given, and in depth discussions were had with facility owners in regard to the history and operations of their business.

The net result of these combined efforts is that seven of the eighteen target respondents reached completed the survey, leading to a total response rate of 39%. Concurrent with these surveys and interviews, formal and informal interviews were conducted with a set of institutional and other stakeholders who have regular interactions with North Carolina’s small meatpackers. I spoke with a number of individuals who provide technical and other forms assistance to the sector. I also had the opportunity to talk to one farmer who regularly works with these packers to get meat products to local markets, and to one retailer who is currently engaged in a pilot project with two small meatpackers in the state. In addition, during the course of this research project I was invited to attend the North Carolina Meat Processors
Association’s Mid Winter Educational Meeting. Doing so provided valuable perspective on industry dynamics and gave me a window in to some of the most timely issues facing small meatpackers.

Using the research methods identified above, I was able to make a set of findings in regard to the range and severity of challenges faced by the set of small meatpackers in North Carolina who are willing and able to work with the state’s small to mid-size farmers. Below I share these findings in the hope that they will help planners and others begin to identify the current barriers and challenges to integrating these small meatpackers as more viable links in the state’s local meats value chain.

**Working With Small to Mid-Size Farmers**

Considering the number of small to mid-size farmers producing livestock in North Carolina, and the increasing numbers of farmer’s markets and other direct sales outlets available to them, it was not surprising to learn that most survey respondents do some level of business with these farmers. I found that one respondent was primarily oriented toward serving small to mid-size farmers. He is considered the go-to processor for a number of farmers in the Piedmont region of the state practicing sustainable agriculture. Others were only working with these farmers as a small but consistent portion of their business. The remainder process animals for this customer base only intermittently. It was unclear exactly how much of the product resulting from these co-packing arrangements would qualify as sustainable or niche meat products. Two survey respondents are currently participating in the NC Choices pilot noted earlier, supplying the state’s largest natural foods co-op with weekly deliveries of local
beef and pork that is produced sustainably on family farms. One of these same respondents also processes weekly orders of beef for the Whole Foods Market located in Chapel Hill.

When talking with some industry stakeholders there is an unspoken but powerful assumption that most processors prefer not to serve small to mid-size farmers seeking access to local markets. Yet, when asked what their biggest challenges were to working with small to mid-size farmers the majority of respondents indicated that the challenges were actually quite limited. There was a general consensus that farmers often don’t understand meat processing, and that they therefore have special requests that can be difficult to accommodate. But most processors with whom I engaged seemed to easily handle this by providing a little customer education. Three of the processors that I interviewed described using a customer service oriented business model, indicating that it was a competitive advantage for them to be attentive to farmers’ special requests. They saw it as their job to educate farmers about how to get the most profit out of their animals, and enjoyed advising them on the best way to fully utilize the animal. Two respondents indicated that inconsistent numbers of animals coming from small to mid-size farmers was a problem. However, none of the processors who responded to the survey have minimum processing requirements for their customers.

**Other Customers & Capacity**

In addition to performing fee-for-service slaughter and processing for small to mid-size farmers, most respondents perform these same services seasonally for hunters, and some do so for regional brokers and distributors participating in commodity markets. I found that all survey respondents do more than just fee-for-service work. All of their business models include
on-site retail operations. In addition, five out of seven respondents supply product to restaurants in close proximity to their facility, and two out of seven supply local retailers. Three out of seven respondents distribute products under their own label into wholesale markets. Many of the animals sourced for these retail and wholesale opportunities are cull pigs or cows. As noted previously, these packers fill an important gap for large contract farmers unable to move their “slow growers” in traditional commodity markets. These packers also source livestock at local auctions.

When asked about the species of animals being processed in their facilities, all seven survey respondents indicated that they process beef, and six of the seven process pork. The one respondent who does not process pork is a halal facility, and thus does not do so for cultural reasons. Only one survey respondent indicated that they process poultry. Interviews with industry stakeholders confirm that this processor is indeed the only small meatpacking facility in the state available to small and mid-sized poultry farmers. He is capable of handling up to 100,000 birds annually. Capacity for beef and pork processors ranged considerably based upon both the size of their facility and the size of their workforce. The smallest facilities handle as few as one cow each week and four hogs per week, while the largest handle up to seventy cows per week and one hundred hogs per week. When survey respondents were asked if they could handle increased input to their facility three said that they could, and the remainder indicated that they could if they implement changes such as hiring more workers or updating their equipment.
**Capabilities**

All of the packers that were targeted for this study are capable of slaughtering livestock and breaking down the resulting carcasses into primals, the basic sections from which steaks, pork chops, and other products are cut. Most are able to produce fresh cuts of meat and to perform very basic value-added services such as grinding and dry-aging. However, very few perform the range of value-added services that farmers desire. Of those who responded to the survey, only one is currently capable of providing a full range of value-added services including curing, smoking, brining, salting, and sausage making. Industry stakeholders verify that this particular packer is currently the only small meatpacker working with small to mid-size farmers who is capable of producing high margin, value-added products such as bacon and ham.

Unfortunately, this packer is located far away from both the state’s population centers and the majority of small to mid-size farmers practicing sustainable agriculture. This situation will soon change, as The Golden Leaf Foundation recently awarded grant funding that will be used to considerably increase value-added processing capabilities at a facility that is in close proximity to a number of farmers oriented towards local niche markets.

Value-added processing equipment is not the only kind of equipment important for helping farmers profitably access local markets. Small meatpackers must also possess the right kinds of packaging and labeling technologies. All survey respondents indicated that they provide vacuum seal packaging, and many are capable of providing labeling that indicates the farm of origin. This form of packaging is the minimum required for farmers to satisfy consumers in direct markets such as farmer’s markets and local meat buying clubs. Interestingly, none of the survey respondents indicated that they are capable of providing what
would be considered retail ready packaging. Retail grocers demand that meat products look appealing on their shelves, meeting consumer expectations, and that they have a reasonable shelf life.

**Challenges**

When survey respondents were asked to identify the biggest challenges to growing or expanding their business the most frequent response was “finding and keeping a trained workforce”. The second most common responses were “HACCP or other regulatory compliance” and “lack of capital to do plant upgrades”. Survey respondents were also asked about the types of assistance of support that would be most beneficial to their business. The most frequent responses to this question were “access to capital”, “marketing and sales”, and “business skills”. Through consideration of these and other survey responses, and based on information obtained during interviews, I have divided the challenges faced by North Carolina’s small meatpackers into six categories. Below I share the most pertinent findings within each of these categories, ranking them from most significant to least.

**Workforce**

The most noted challenge for the small meatpackers who participated in this research project was “finding and retaining capable labor”. Survey respondents varied considerably in regard to the number of full-time production employees they currently have on staff. This variation was seemingly correlated to the volume of animals moving through their facilities. The smallest facilities employ an average of three full-time production employees, while the
largest facility employees approximately twenty-five. Interestingly, only one respondent indicated that the need to hire more workers was a limiting factor in their ability to accommodate increased input.

When asked how many years of experience their meat cutters have on average, the most frequent response was “ten to fifteen years”. Through my in person interviews with packers I was able to discern that most facilities have a core group of two to three senior cutters who have been with that facility for twenty or more years, and then a set of entry level staff that come and go. One interviewee used the term “revolving door” to depict the turnover rate that his facility sees with his entry-level staff members. All spoke passionately about how difficult it is to find good labor. There was a general consensus that “people don’t want to work anymore”, and that young people are not being attracted to the sector.

Considering the high turnover rate for entry-level employees, one somewhat surprising finding from survey results was that most packers pay competitive wages. Six of the seven survey respondents indicated that they pay their meat cutters between ten and fifteen dollars per hour. While perhaps not always a living wage, this is significantly more than minimum wage, and is comparable to wages paid at large meatpacking facilities in North Carolina.

Another workforce related challenge identified from survey responses was “access to training programs for staff”. During the course of my interviews I discovered that training for entry-level meat cutters is typically provided on the job. Because of the difficulty recruiting and retaining employees, criteria for evaluating new hires are minimal. Plant managers indicated that they look for employees who are willing to work hard and demonstrate interest in learning new skills. To test for these qualities they often start new employees out in some of the nastier
jobs in the facility, such as cleaning the kill floor. If they see that the employee shows initiative they will quickly move them into more highly skilled and better-paid positions. One plant manager commented that he can tell by the way an employee first picks up a knife if they will be any good.

**Regulation**

One of the second most noted challenges for the small meatpackers who participated in this research project was “HACCP or other regulatory compliance”. Specifically, keeping up with changing regulations was found to be the difficulty these small meatpackers face. Several commented extensively on how regulations are constantly changing, along with the interpretations of those regulations.

When asked if they had any ongoing regulatory issues or challenges the majority of respondents indicated they did. One responded “None that we cannot work with.” Another explained, “Anybody in the meat business does. Because regulations are always changing. There is always more to do, and this is likely to get worse.” Several other respondents echoed this sentiment. One interviewee spoke specifically about how he is working to adjust to the requirements of new regulation being put in place to mitigate the risk of bovine spongiform encephalopathy (BSE). Another indicated that humane handling requirements had been a recent challenge. The paperwork involved in meeting regulatory requirements was noted as a burden by several packers.

Regardless of their regulatory category, nearly all survey respondents expressed that they currently have a positive relationship to their inspector. Of the seven survey respondents, two
are State Plants, four are TA Plants, and one is USDA Inspected. I found that owners of State Plants had no interest in becoming TA or USDA Inspected Plants. They felt they had sufficient business opportunities engaging only in intrastate commerce, and therefore found no need to switch their status. For most the decision to be a State Plant had been made several decades prior and had never been reconsidered. Likewise, TA Plants had no interest in becoming USDA Inspected. Several respondents indicated that inspection by NCDA&CS staff was preferred to inspection by USDA employees, as they felt that local regulators were more likely to be understanding of their needs and constraints. When asked if they had ever received assistance meeting regulatory requirements four of the seven survey respondents indicated they had, from either the NCDA&CS or NCSU.

NCSU’s Meat Extension Specialist finds that for the most part the state’s small meatpackers have a love-hate relationship with regulations. This sentiment was indeed expressed during my in person interviews with packers. They recognize that complying with food safety regulations is what allows them the privilege of selling product to consumers, but are also extremely frustrated by the constant changes and seemingly never ending stream of paperwork involved. Several indicated that the need to create new HACCP protocols for each new product line processed in their facility acted as a deterrent to new product development.

**Access to Capital**

When asked what types of assistance or support would be most beneficial to their business moving forward the most frequent response given was “access to capital”. In addition, one of the second most noted challenges for survey respondents was “lack of capital to do
In spite of this pronounced frustration with a lack of access to capital, the majority of survey respondents lacked clear ideas of how they might use such capital. Five of seven survey respondents indicated they are interested in opportunities for expanding or growing their business, but only two could offer specific ideas of investments that would be necessary to do so.

**Marketing & Sales**

The second most frequent response to a question about the types of assistance or support that would be most beneficial to survey respondents was “marketing and sales”. One respondent indicated that due to the remote location of his facility potential customers have a hard time finding them. He felt this was a hindrance to his business, and that more advertising could be a potential solution to this problem. This packer had a particularly passive approach to marketing, taking whatever business came his way based on historic relationships, with no effort to secure regular contracts or new customers. This same packer expressed a distinct disbelief in the long-term potential of markets for sustainable local foods. He viewed increasing demand for local niche meat products as a trend, and not one he was willing to take a bet on.

Of those interviewed, three packers were actively seeking new market opportunities, with a specific interest in offering local meat products to local consumers. However, these packers seemed to lack an understanding of how they might access and serve what they saw as growing niche markets for local foods. One processor was particularly eager for assistance tapping into these markets, as he believes them to be an exciting opportunity to diversify his customer base and grow his business. He explained that the core customer for his on-site retail operation was
a disappearing demographic of older rural consumers, and admitted that he does not understand the wants or needs of consumers looking for sustainable local foods. He asked me a number of questions about what people in a place like Chapel Hill eat, and was particularly interested in assistance with product development. He had a sense that this new market would appreciate products like salami or proscuitto, but had no familiarity with these products himself or how they are consumed by others.

During the course of my interviews I found that very few packers understood the importance of branding or product management. Most lacked an understanding of the variety of activities involved in strategic marketing and sales. While two packers indicated that they had studied business in college, most are tradesmen who have always worked in the family business.

**Business Planning & Management**

The need for assistance with business planning and management was also identified by these small meatpackers. None of the survey respondents indicated that they had received such assistance in the past. When asked an open ended question about their challenges a number of respondents indicated difficulty managing their cost structure. One explained that their costs go up every year, so that it is difficult to stay competitive.

During the course of this research project I was able to make a number of observations in regard to the business practices of these small meatpackers. I found that most do not use email or other basic computer technology in their every day operations. They are heavily reliant on fax machines and other more basic tools like invoice books and other paper records.
Waste Disposal

Only one survey respondent named waste disposal as a challenge for their business. However, several interviewees noted that fees charged for the collection of offal\(^{16}\) have steadily increased over the years. And many reflected upon a time when rendering companies paid them for their offal, so that waste from their facility actually generated an additional revenue stream. One indicated that they used to receive a monthly check from the rendering company for upwards of $400, but now they get an invoice from the company for that amount or more.

Most of the packers with whom I engaged were not happy with the fact that they only have one option for disposal of their offal. Carolina Byproducts is the only renderer operating in North Carolina, and thus has an effective monopoly over the state’s small meatpackers. Several packers were very uncomfortable with this situation, expressing that they felt at the mercy of the company, as they don’t see any other viable alternatives for waste disposal.

Carolina Byproducts was recently acquired by Valley Proteins, one of the four largest renderers in the country.

Opportunities

When asked if they were interested in expanding or growing their business, the majority of survey respondents indicated they were. Only two said no. One explained that they have a family operated business as well as farmland, and are always busy in both. From the in person interviews I conducted I found that these small meatpackers are generally always interested in opportunities to grow their business. In fact, two facilities had recently taken significant steps

\(^{16}\) Offal is the term used for the waste parts of a butchered animal, such as bones, feet, and guts.
to do so. As noted above, with the assistance of The Golden Leaf Foundation, one will soon be installing nearly half a million dollars worth of equipment to offer more value-added products to their customers. Another recently added a full-service poultry processing facility to their operation, and is eager to process more chickens in the coming year and to branch into processing quail, ducks, and turkey as well.

However, these two packers taking strategic steps to grow and expand their operations were exceptions. Most interviewees seemed to lack clear ideas of how they might grow or expand their business. They were open to opportunities, but not actively seeking them. When asked directly about the biggest opportunities for expanding their business very few respondents had specific or targeted responses. One indicated food stamps as an area of opportunity. One identified a move into providing local foods to local consumers. Similarly, another stated “the market is endless for helping independent farmers with natural niche products.” Due to his location and capabilities, this particular packer is in the unique situation that nearly 100% of his customers are small and mid-sized farmers selling their products at farmers markets and to select restaurants throughout the state.

All survey respondents indicated that they would be interested in opportunities to serve more small to mid-size farmers. One explained that their work with this clientele had declined over the years. This was something I heard multiple times - that business with small to mid-size farmers had dwindled over the years as the farmers had disappeared or increased their scale and turned to contract farming for large packers, but was picking up again.

I found that many of the packers that I engaged with were in a sort of Catch-22. In order to have a more profitable business they recognized the need to expand and access new market
opportunities. But they were largely unaware of what these market opportunities might be and already stretched thin and could not afford to expand, either financially or in terms of other resources such as workforce.

**Collaborative Solutions**

One way that small meatpackers might remain competitive in today’s marketplace is by working together. When asked if they would be interested in collaborating with other small meatpackers to help local small and mid-sized farmers to access local markets, only one respondent said no. This respondent specified that they like having a small, independent business. Throughout the course of this research I found that the small meatpackers who I engaged with were much more interested in collaborating with one another than I anticipated. One explained that other packers “know what you are going through” and “maybe have ideas that could help you.”

When asked about the specific reservations that they would have about collaborating with other small meatpackers, few were named. Two respondents did indicate that independence was very important to them. One for liability reasons, not wanting “to be tied to what someone else does”. Another because they were concerned about tightly controlling their growth, preferring to remain small due to limited resources.

Going into this project I had assumed these small meatpackers would be fiercely independent small business owners. I found that they do indeed take great pride in their businesses, and value their independence. But they also recognize the need to create new market opportunities for themselves. And they recognize that they don’t necessarily have the
marketing and sales expertise or technical capabilities needed to access these opportunities. They know that they are in a highly regulated industry, and that their competitiveness is in many ways dictated by the larger industry structure that surrounds them. Therefore, they are open to new ways of finding their niche.
Chapter 5: Recommendations and Conclusion

The previous chapter discusses in depth the findings of this research project in the hope that they will help planners and others to identify the current barriers and challenges to integrating North Carolina’s small meatpackers as part of a dynamic local food economy. In this chapter I identify what I believe to be the key findings of this study, and offer an integrated analysis of these findings along with a set of recommendations for potential institutional and other solutions to address the challenges and opportunities identified. In addition, I provide a conclusion and suggestions for further research. The findings and conclusions presented in this chapter give hope that the existence of excess capacity amongst the packers who participated in this research project indicates that addressing key challenges within the sector could result in a more viable local meats value chain within North Carolina.

Key Findings

- There is significant excess capacity amongst the set of small meatpackers in North Carolina willing and able to work with small and mid-sized farmers seeking access to local markets.

- There is a dramatic need for more value-added processing capabilities within the sector. Upgrades to packaging and labeling equipment are also needed.

- Recruiting and maintaining an adequately trained workforce is a serious challenge for these small packers. The sector is heavily dependent upon the expertise of a small group of senior cutters and plant managers who have been in the industry for upwards of 20 years. Young people are not being attracted to the sector as a profession.

- The small meatpackers surveyed are notably frustrated by constant changes in food safety regulations. The need to develop new HACCP protocols for each new product line being processed in a facility acts as a deterrent to new product development. However, most survey respondents have productive relationships with their inspectors, and can get the support they need when compliance problems arise.
- Several survey respondents expressed an interest in offering local meat products to local consumers. However, they lacked an understanding of how they might access and serve what they saw as growing markets for sustainable local meats.

- Currently the majority of these small meatpackers are operating without access to email or basic computer software packages. They are therefore heavily reliant on manual processes and paper records.

- Survey respondents were surprisingly open to collaborating with one another to address the challenges and opportunities they face.

**Analysis of Findings & Recommendations**

In the following subsections I provide an analysis of my key findings, putting them into conversation with each other and an understanding of the institutional and other resources available within the state of North Carolina to make a set of recommendations for potential actions for addressing the challenges faced by North Carolina’s small meatpackers.

**Customers and Capacity**

The majority of survey respondents indicated they could accommodate increased input to their facility by making slight changes to their operations, and that they would welcome it. These same respondents noted that they would welcome more business from small to mid-size farmers. In fact many saw serving these farmers as their biggest business opportunity. In conversation with other findings, the existence of excess capacity amongst these small meatpackers, and their interest in working with small to mid-size farmers, suggest that improvements to the sector in regard to workforce and capabilities could result in a more viable and dynamic local meats value chain. The capacity of the state’s small meatpacking facilities is not the limiting factor to growth and development of markets for local niche meat products.
Once solutions are provided for key operational challenges within the sector, it will no longer act as a bottleneck.

Capabilities and Workforce

As noted in my findings, only one respondent indicated that the need to hire more workers was a limiting factor in their ability to accommodate increased input. This indicates that while packers certainly struggle with the need for more workers, the more precise need is for skilled workers that will allow them to produce the quality and variety of products necessary to compete in the marketplace.

When farmers have to travel great distances to the nearest processing facility this cuts into profits and can stress their livestock, resulting in a lower quality of meat. While small meatpackers are spread fairly evenly throughout North Carolina, the proximity of a processor is not always their most important attribute. It is extremely common that the nearest slaughter facility does not provide all the services a farmer desires in order to optimize their profits. Only one small meatpacker in North Carolina is currently capable of producing a full range of value added products. As a result of grant funding recently awarded by The Golden Leaf Foundation, another facility recently installed nearly half a million dollars in value-added processing equipment. However, significant training will be required before they are able to optimize the use of that equipment.

North Carolina’s small meatpackers need help attracting and retaining a trained workforce. While some indicated that they have received assistance from their local unemployment office identifying potential new hires, none had received support with the
training and development of skilled workers.

The problem these packers face recruiting young people as entry-level meat cutters is not specific to North Carolina. Due to shifts in the production practices and product mix of large packers, and related changes in the retail grocer sector, butchery is a disappearing profession (MacDonald et al, 2000). According to the US Bureau of Labor Statistics employment of highly skilled butchers is declining. In 1994 there were 218,994 skilled butchers and meat cutters in the United States. By 2002 there were only 132,000, and this number has continued to decline (Martin & Lawson, 2005).

In order to remedy the workforce problems facing the state’s small meatpackers I recommend the development of a community college program aimed at reinvigorating the lost art of butchery. The program could leverage the embodied knowledge of the remaining senior cutters in the sector, ensuring that it is not lost. It could also serve as a link between local chefs and small meatpackers, resulting in innovations in product development, and improved linkages between these rural packers and the state’s most active markets for local, niche meat products. Trends in the culinary world toward working with “lost” cuts of meat and utilizing whole animals have sparked an interest “nose-to-tail” eating, and piqued a new level of consumer interest in butchery. Such dynamics suggest that through strategic partnerships, outreach and education there is a potential for making the sector more attractive to young people.

NCSU is home to a well-reputed school of food science that offers coursework and degrees in meat science. However I found that this program is primarily oriented toward industrial scale production of meat products. Their labs are funded by large meatpacking
companies, and students and staff are trained to strive for “safe, affordable, and abundant food” with an implicit assumption that scale is the only way of achieving that goal. While the Meat Extension Specialist housed in the program does provide a considerable amount of technical assistance to small meatpackers, most graduates leave the state to work for large food companies. Therefore, ties between this program and the proposed community college curriculum would be important, but likely limited in scope.

Regular workshops that allow small meatpackers more frequent and structured access to facilities, staff, and students in NCSU’s Department of Food Science would be another important way to achieve the training in value-added processing and the assistance with new product development needed within the sector. I recommend that the NCDA&CS develop and sponsor such workshops.

Through interactions with various actors in the state’s local foods movement I have discovered that there is latent demand for products like a North Carolina proscuitto, or locally produced bologna and hot dogs. Currently small to mid-size farmers seeking to meet this demand must travel out of state, to processors as far away as Pennsylvania. Once the above recommended training and partnerships are implemented further investments in the state’s value added processing infrastructure would be assured to generate significant returns for both processors and the farmers they serve.

Investments in better packaging and labeling equipment would also generate new market opportunities. None of the packers who participated in this study are capable of providing retail ready packaging. This severely limits their ability to help farmers seeking access to retail and food service markets. Retailers in particular have high expectations for shelf-ready
packaging, demanding that it ensure an optimum shelf life while also meeting consumer expectations. I recommend that as assistance is provided to the sector, and improvements in their capabilities are made, strategic investments be made in the equipment necessary to supply retailers with shelf-ready products.

Regulation

As this research project was being conducted, reports surfaced in local newspapers suggesting that North Carolina Governor Beverly Perdue was considering ending the state’s meat and poultry inspection programs as one of many steps to manage a growing budget crisis (Christensen, 2009). This is not the first time that the program has been on the chopping block, but past attempts to cut it have failed. This is largely attributed to the fact that federal funding covers 50% of the program’s operating costs. The program leverages important federal dollars and extends the capacity of the USDA’s Food Safety and Inspection Service for inspecting small and very small plants.

If North Carolina’s meat and poultry inspection programs were to be cut the USDA would be required to take over inspection of all plants currently inspected by NCDA&CS staff. Anecdotal accounts suggest that when the USDA has taken over state inspection programs in other states 20-30% of very small plants have closed. Conventional wisdom suggests that small meatpackers in states with their own state inspection programs are provided more personalized guidance, particularly in developing and implementing HACCP protocols. In one recent study, state inspection directors from states that have retained their state meat inspection programs cited greater ease in responding to the unique needs of processors and
the desire to develop local or niche markets as reasons for keeping the program (UNPPC, 2001).

These sentiments are very much in line with those expressed by many of the packers who I engaged with during the course of this project. In addition, my presence at the NCMPA Mid-Winter Educational Meeting allowed me to witness firsthand the proactive way in which the NCDA&CS engages with the sector. By all accounts, the agency’s Meat and Poultry Inspection Division does a commendable job providing necessary technical assistance to the state’s small meatpackers. Therefore, it is my strong recommendation that North Carolina’s state meat inspection programs not be cut, but continue to be funded at their current levels. In order for North Carolina’s small meatpackers to survive and to become more viable links in the state’s local food economy it is critical that both the NCDA&CS and NCSU continue their roles in supporting the sector.

As noted previously, all survey respondents reported positive relationships with their inspectors. I found that regulation is not a challenge from a compliance perspective, but rather from a resources perspective. Frequent changes in regulation were reported to be a major source of frustration, creating added expenses and hindering productivity. Packers explained that each product line coming out of their facility requires its own HACCP protocol and corresponding batch of paperwork. Therefore, anticipation of regulatory burdens is something that keeps processors from engaging in new product development.

Food safety is a major and emerging issue for the local foods movement. As more consumers are sourcing their foods from farmer’s markets, and as local sourcing initiatives such as farm-to-school programs are becoming more widespread, small to mid-size farmers are being asked for increasing numbers of certifications. Local foods advocates are struggling to
find an approach to managing food safety that is scale appropriate and mindful of the limited resources available to small and mid-sized farmers.

Small meatpackers are well positioned in this regard. They are already operating under tight regulatory control, meeting strict standards for participating in local commerce. However, it is unclear that subjecting small meatpackers to a set of constantly changing regulations that are largely designed to monitor activity in large industrial meatpacking plants is appropriate. One packer explained why he feels that small meatpackers should be regulated separately. While he believes strongly in operating a clean facility and maintaining good paperwork, he feels that the regulations he is subject to are overkill for a small facility like his own, and perhaps insufficient for large industrial facilities. He observed that the meat recalls causing constant changes in regulation are occurring almost exclusively in large plants. Because of their scale, inspectors in those plants couldn’t possibly catch every potential problem. But in a facility like is own the ratio of animals to inspectors is entirely different.

Based on my research findings, and an understanding of emerging issues within the local foods movement, I recommend research and development of scale appropriate food safety regulation for small meatpackers. This work could be done as a collaborative effort between the USDA’s Food Safety and Inspection Service and a set of the remaining state level meat and poultry inspection programs in the country.

**Access to Capital and Business Planning & Management**

I found that lack of access to capital was a persistent complaint for North Carolina’s small meatpackers. And yet the majority of these packers lacked specific ideas for investments
necessary to grow or expand their business. It is critical that efforts to support the state’s small meatpackers are not limited to “throwing money” at the sector. My findings suggest that the majority of these packers need assistance with business planning and management, and help understanding and accessing local markets for niche meat products before investments within the sector would have substantial returns. I believe that the real pain point for these packers is not access to capital, but rather the increasingly tight margins within which they operate, and their inability to identify and go after lucrative growth opportunities.

Only two of the small meatpackers interacted with during the course of this research project have received any level of professional business training. I don’t believe it to be merely a coincidence that these same two packers are considered by many industry stakeholders to be the most successful, and the most viable links in the state’s local meats value chain. Getting local meats into local markets at a price that consumers will pay is no easy task. Small meatpackers face increasingly high operating costs. They struggle to perform at the same efficiencies as large packers whose products they must compete with in the marketplace. Remaining competitive as a small meatpacker requires a degree of professional business planning and management that most small meatpackers are not currently capable of. The sector needs an increased focus on business fundamentals. I recommend that North Carolina’s small meatpackers make use of the state’s existing resources for small businesses. And that business counselors within the state’s Small Business and Technology Development Centers do coordinated outreach to the sector.

North Carolina’s small meatpackers need to be brought into the 21st century in regard to basic business management. Increased computer literacy within the sector would allow for the
use of fundamental business tools such as e-mail and digital record keeping. And increased automation of certain operational parameters such as temperature control would create much needed efficiencies. Currently very few processes in these small meatpacking facilities are automated and there is heavy reliance on low-tech methods of communication and records management. This is a significant problem for a heavily regulated industry that requires continuous monitoring of various operational processes and a tremendous amount of recordkeeping. Therefore, I recommend that the sector be supported both financially and technically in making necessary technological upgrades.

**Marketing & Sales and Collaborative Solutions**

Three of seven survey respondents expressed an interest in offering more local meat products to local consumers. But they lacked an understanding of the most strategic ways they might do so. Currently, the only way that North Carolina’s small meatpackers are participating in the local meats value chain is through co-packing arrangements with sustainable local farmers. Yet there is tremendous opportunity for them to provide local niche meat products to local retail grocers and restaurants. To become more viable and active links in the local food system these packers need assistance understanding the needs and preferences of the sustainable local foods consumer, and the ways in which they might access that consumer.

There is a clear need for an intermediary organization to act as a marketing and sales cooperative for North Carolina’s small meatpackers. During the course of this research project I’ve learned that demand from the state’s natural food grocers and fine dining establishments for a consistent and aggregated supply of local niche meat products is high. There is a definite
opportunity to create and supply these channel markets with a line of premium branded local
meat products. Doing so would solve a number of pain points for those looking to build a
sustainable local food system. Yet packers are not equipped to carry out the branding and
product management activities necessary to serve these channel markets.

I recommend the creation of an intermediary organization to do the branding and
relationship management necessary to consistently get a supply of sustainable, local meat
products to market. The current NC Choices pilot demonstrates a willingness from local
retailers and chefs to be flexible and patient as the supply chain for such a marketing and sales
cooperative is developed. And survey responses indicate a remarkable level of interest in
collaborative solutions amongst the state’s small meatpackers. These packers understand their
weaknesses, and recognize the need to create new market opportunities. They acknowledge
the potential gains to be had from affiliation with an organization that could help them to
access growing markets for sustainable local foods, and are open to working with one another
to secure these gains.

Waste Disposal

Small meatpackers operating in North Carolina currently have only one option for proper
disposal of offal. There is only one rendering company in operation in the state, and landfills
will not accept residuals of animal carcasses. There is a pressing need for innovation in the
arena of waste disposal for the state’s small-scale slaughter and processing facilities.
Nationally, significant research has been done on composting as a means for disposing of offal.
The term “natural rendering” has emerged to describe the process. I recommend that
resources within the NCDA&CS or NCSU be used to investigate the viability of composting as a cost effective alternative for disposal of offal, and to develop recommendations regarding best management practices for offal composting.

**Conclusion**

While the challenges facing North Carolina’s small meatpackers are significant, there are a number of resources available to the sector. In general, I found that technical support for small meatpackers in North Carolina is strong. The majority of survey respondents had received some form of free technical assistance at some point in their history. Additionally, those who had not taken advantage of this assistance knew that it was available. The most popular kind of assistance being received in meeting challenges was with regulatory requirements. However, processors have also received assistance increasing their processing efficiency and securing access to capital.

The grant recently awarded by The Golden Leaf Foundation to assist one processor with the acquisition of new value-added processing equipment is a sign that important funders are beginning to see the link between supporting North Carolina’s small meatpackers and creating opportunities for the state’s small and mid-sized farmers. Yet to stop small meatpackers from being a bottleneck within the local foods movement more proactive strategies are needed.

Although it did not rank high as a challenge in survey results, the increasingly high cost of doing business is a thread that runs throughout many of the challenges identified by survey respondents. Frequent changes in regulation create unanticipated expenses, hinder productivity, and are a hidden cost of innovation. Margins for these packers have gotten
slimmer and slimmer over the years as the cost of necessities like waste disposal and packaging materials have escalated, along with the cost of important employee benefits such as health insurance and workers’ compensation.

Nationally, innovation and differentiation of product have allowed a number of small meatpackers to stay afloat while many more have been forced to exit the industry (Petersen, 2005). Small meatpackers cannot compete on efficiency. They must find other sources of competitive advantage. For North Carolina’s small meatpackers a promising potential strategy for differentiating themselves is participation and innovation within growing niche markets for local meat. However, support for such participation and innovation is necessary. Publicly funded research and outreach within the state have historically focused very heavily on the needs of large-scale operations. Funding sources need to be redirected in order to provide the cost-sharing necessary for small processors to innovate and thrive.

Currently the relationship between North Carolina’s small meatpackers and the small to mid-size farmers in the state practicing sustainable agriculture is limited to co-packing arrangements. These co-packing arrangements are allowing some farmers to participate in direct markets for local foods. However, these arrangements do not create market opportunities for the state’s low resource farmers, who have little interest or ability to market their own products. Collaborative solutions are necessary in order to move beyond direct markets and create linkages to the state’s retail grocers and restaurants, and to develop the range of value-added products that local consumers demand.

The current role that the small meatpackers examined play in educating farmers on the best ways to fully utilize animals in order minimize waste and maximize profits suggest that
they are important intermediaries that need to be bolstered. My findings also suggest that there is a growing interest within the sector in understanding and accessing niche markets for local foods. Bringing interested packers together into a consortium, or a marketing and sales cooperative, would be a productive and important step in developing them as a more viable and dynamic links in the local food system.

Further research is necessary to build upon the findings and recommendations presented in this paper. There is a definite need for a companion piece to this research project that engages directly with the small to mid-size farmers in North Carolina producing livestock. An understanding of their perspective on small meatpackers, particularly their view of the role that these packers play in helping them to access local markets, is critical. It is also important to determine the level of interest that these farmers have in working collaboratively to take advantage of new market opportunities. Input from local food consumers and channel markets is also critical to fully understand the barriers to expanding growth in local, sustainable meat production in North Carolina. Market research is needed to quantify local demand for sustainable local meat products, willingness to pay for those products, and to determine what attributes of these products local consumers most value. Finally, there remains the unanswered question of how to get more small meatpackers in the state to engage with small to mid-size farmers. Putting my research findings into conversation with findings from the research suggested here will provide insight into programs and supports that can be developed to educate and engage more of North Carolina’s small meatpackers in the state’s local meats value chain.
References


Appendices
**Survey to Determine Challenges and Opportunities for NC’s Small Meatpackers**

This survey is being conducted by Tina Prevatte, a graduate student in UNC-Chapel Hill’s Department of City and Regional Planning. It will take approximately 15 minutes to complete, and the information collected will be used to determine the diversity of concerns and constraints being felt by North Carolina’s small meatpackers, and to put forth a set of recommendations for potential policy changes or other next steps necessary to support the sector.

What is the name of your business?
_________________________________________________________________

Name of person filling out this survey?
_________________________________________________________________

1. What services does your facility provide? Check all that apply.
   __ Slaughter
   __ Custom Exempt Processing
   __ USDA Inspected Processing
   __ NCDA Inspected Processing
   __ Value-Added Processing (smoking, aging, grinding, sausage, brining, curing, etc.)
      Please specify: ___________________________________________________________________
   __ Other (e.g., kosher or halal processing): _____________________________________________

2. What sort of packaging/labeling does your facility provide? Check all that apply.
   __ Cut and wrap. Please specify:
      __ Paper wrap
      __ Tray and shrink
      __ Vacuum sealed
      __ Other: _______________________________________________________________________
   __ Retail-ready packaging. Please describe: ___________________________________________________________________
   __ Other: _______________________________________________________________________

3. What is the current maximum capacity of your facility for each species processed?
   Please indicate if you are reporting by week ___, month___, or year___
   Cattle____________________
   Hogs_____________________
   Poultry___________________
   Other: ____________________

4. Do you have a minimum processing requirement per customer?
   __ No
   __ Yes
      Minimum charge? __________________________________________________________________
      Minimum number of animals?
         Cattle____________________
         Hogs_____________________
         Poultry___________________

5. Approximate per head price of your services?
   Cattle____________________
   Hogs_____________________
   Poultry___________________

6. On average, what does it cost you to process each animal?
   Cattle____________________
   Hogs_____________________
   Poultry___________________
7. How many animals did you process in 2008, and how many are you estimating for 2009? Please indicate if you are reporting by week ___, month___, or year___

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8. If customers brought in more animals in the future, would your facility be able to accommodate the increased input?
   ___Yes, our facility is currently able to accommodate increased input
   ___Yes, our facility could accommodate increased input by implementing the following changes (e.g., hiring more workers):
   ___Yes, but only during certain times of the year
      What months:
   ___No, our facility is already processing at maximum capacity
   ___Other:

9. How many (full-time equivalent) production employees do you currently have? Please circle.

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10. On average, how many years of experience do your meat cutters have? Please circle.

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11. On average, how much are your meat cutters paid? Please circle.

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12. If your facility is USDA inspected for slaughter and processing, how would you describe the availability of a USDA inspector at your facility?
   ___A USDA inspector is on-site at all times
   ___A USDA inspector is on-site part-time
   How often is the inspector on-site?

13. If your facility is not USDA inspected, why not? Check all that apply.
   ___Our facility is at full capacity with custom exempt processing
   ___Our facility is at full capacity with NCDA inspected processing
   ___Our geographic location is too remote
   ___No demand from clients for USDA inspection
   ___Regulatory requirements too complex
   ___Too expensive to comply with USDA inspection requirements
   Please explain:

   ___NCDA inspection is preferred
   Please explain why:

   ___Other:

14. Do you have any ongoing regulatory issues or challenges? Please explain.

   _____________________________________________________________
   _____________________________________________________________
   _____________________________________________________________
   _____________________________________________________________
15. Who are your primary customers? Please indicate what % of your business they represent.
   __% Contract farmers
   __% Independent farmers
   __% Hunters
   __% Retailers
   __% Restaurants
   __% Other: ____________________________________________________________

16. If you buy live animals for processing and distribution under your own label, where do you purchase them?
   ___ At auction
   ___ Direct from farm
   ___ Other: ____________________________________________________________
   ___ Not applicable

17. If you distribute meat under your own label, what is your method of product distribution? Check all that apply.
   ___ Direct sales
   ___ Retailers
   ___ Distributors/Wholesalers
   ___ Restaurants
   ___ Institutional foodservice market (e.g., hospitals)
   ___ Other: ____________________________________________________________
   ___ Not applicable

18. Are you interesting in expanding or growing your business?
   ___ No
   ___ Yes
   ___ Other: ____________________________________________________________

19. Are you interested in serving more independent farmers?
   ___ No
   ___ Yes
   ___ Other: ____________________________________________________________

20. What are your biggest challenges to working with independent farmers? Check all that apply.
   ___ Inconsistent number of animals
   ___ Special requests for processing
   ___ They don’t understand meat processing
   ___ They expect organic certification
   ___ They expect animal welfare certification
   ___ Other: ____________________________________________________________

21. What are currently the biggest challenges to the success of your business?
   ________________________________
   ________________________________
   ________________________________

22. What types of assistance or support have you received in the past? Please indicate by whom.
   ___ Assistance meeting regulatory requirements (e.g., HACCP):
   ___ Finding and retaining capable labor:
   ___ Training employees:
   ___ Increasing processing efficiency:
   ___ Business skills (e.g., management, financial planning, cost accounting):
   ___ Engineering/process flow:
   ___ Marketing and sales/Communications:
   ___ Access to capital:
   ___ Other: ____________________________________________________________
23. What types of assistance or support would be beneficial to your business? Please rank top 3.
   ___ Assistance meeting regulatory requirements (e.g., HACCP)
   ___ Finding and retaining capable labor
   ___ Training employees
   ___ Increasing processing efficiency
   ___ Business skills (e.g., management, financial planning, cost accounting)
   ___ Engineering/process flow
   ___ Marketing and sales/Communications
   ___ Access to capital
   __ Other:_____________________________________________________________________________________

24. If you are interested in growing or expanding your business, what do you see as your biggest challenges to doing so? Please rank top 3.
   ___ Finding and keeping a trained workforce
   ___ Access to training programs for staff
   ___ Business planning and management
   ___ Marketing expertise
   ___ Waste disposal problems
   ___ Lack of capital to do plant upgrades
   ___ Need assistance with product distribution
   ___ Cold storage capacity
   ___ High operating costs
   ___ HACCP or other regulatory compliance
   __ Other:_____________________________________________________________________________________

25. What do you see as the biggest opportunities for expanding your business?
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________

26. Would you be interested in collaborating with other small meatpackers to help local independent farmers access growing local retail and restaurant markets?
   ___ No
   ___ Yes
   Please explain why:___________________________________________________________________________

27. What reservations would you have about collaborating with other small meatpackers?
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________

28. Do you have a plan to sell or pass your business on (a succession plan)? If so, what is it, and how many years until you would like to retire?
_____________________________________________________________________________________________
_____________________________________________________________________________________________

Thank you for taking the time to complete this survey. Any additional comments you have in regard to challenges and opportunities for small meatpackers in NC are welcome below.
_____________________________________________________________________________________________
_____________________________________________________________________________________________
Appendix B: Locations of Small Meatpackers Surveyed