

## COMMENTARY ON COVID-19 AND THE FOOD SYSTEM

# COVID-19 amplifies local meat supply chain issues in South Carolina

JAFSCD  
Responds to  
the COVID-19  
Pandemic



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**B**efore COVID-19, livestock producers across the U.S. had been complaining to Congress about a lack of meat processing options closer to their farms (Swanson, 2015). Publications used examples of farmers shipping their animals hundreds of miles to be processed (Miles, 2012) and placed the blame on the U.S. Department of Agriculture (USDA) and industry regulations (Linnekin, 2016). Others have warned that decades of consolidation of meat-processing facilities have left fewer reliable options for livestock farmers, threatening the farm-to-table economy (Shanker, 2017).

The COVID-19 pandemic amplified these issues starting in April 2020, when U.S. meat packers shut down or scaled back operations to reduce the spread of COVID-19 among their workers. The resulting

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### Author Note

Steven Richards and Clemson's Agribusiness, Livestock and Forages, and Food Systems and Safety Teams will be leading the local meat supply chain study in South Carolina.

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dip in U.S. meat-packing volumes led grocery store chains to limit the amount of meat customers could buy (Guzman, 2020), and some hamburger restaurants actually had to take hamburgers off their menus (Stump, 2020). Both livestock producers and consumers experienced panic during this time. Worried that the U.S. was running out of meat, consumers started a meat-buying frenzy. In the meantime, animals ready for processing had nowhere to go, causing livestock farmers to lose money or, even worse, euthanize their animals (Repko & Lucas, 2020).

On April 28, 2020, President Trump signed an executive order mandating that U.S. meat processors were critical infrastructure and must remain open (Faulders, 2020). Most processing operations complied with this order, and a more dramatic shortage in the nation's meat supply was largely avoided (Bagen-tose, 2020; Conner, 2020). As a consequence of this close call, U.S. meat prices rose in response to the contraction in supply (Lusk, 2020), and prices remain high. Retail meat prices through the end of May 2020 show year-over-year beef prices up 21.7%, pork prices up 17.7%, and chicken prices up 10.5% (Bunge & Kang, 2020). Wholesale ground beef saw the largest price jump in May, increasing more than 100% from its mid-March price (Bunge & Kang, 2020). The August USDA Meat Price Spreads report shows that prices remain elevated for all three meats (USDA Economic Research Service, 2020).

### **South Carolina's Situation**

South Carolina's situation reflects what is occurring in many other states. The threat of a national shortage and surging retail meat prices have spiked demand for local meat products. Local livestock producers have been swamped with calls from customers wanting to buy their meat products. In South Carolina, this golden marketing opportunity hit an obstacle when farmers called local processors and found that they were backlogged by six to nine months (M. Filion & B. Bowers, personal communication, July 28, 2020).

South Carolina livestock producers are currently petitioning for more processing facilities. And, while more processing capacity is needed, enhancing an entire supply chain involves a more comprehensive solution, as evidenced by past feasibility studies and research.

### **What Do Past Studies Feasibility Studies Tell Us?**

Dozens of feasibility studies on local livestock processing have been performed across the U.S. (Table 1), and rarely did a new processing facility result, even if it was feasible. This is most likely a reflection of high investment costs, with a small, bare-bones facility starting at US\$1 million (Niche Meat Processor Assistance Network [NPMAN], 2016). Another reason could be that some of these studies did not address the entire local meat supply chain. The literature would suggest that at least seven components of the local meat supply chain need to be researched to find comprehensive solutions.

1. **Producer Supply:** Surveying livestock producers to determine how many animals are available for processing each year and if producers plan on raising more animals in the future.
2. **Logistics:** Mapping current processing plants in relation to locations with the highest concentration of animals.
3. **Aggregation:** Exploring ways for producers to aggregate animals in batches, as most processors are dependent on a consistent supply of animals (Gwin, Thiboumery, & Stillman, 2013).
4. **Addressing Inspection Systems:** Many states have both state and federal meat inspection systems. In South Carolina, the two inspection systems have equal standards, but state-inspected meat products cannot be shipped across state lines, limiting the marketing area for some producers.
5. **Slaughter and Processing Capacities:** Surveying current processors to discover what capacity constraints exist and are the most critical.

6. Storage and Distribution: Assessing the local meat supply chain's cold and frozen storage and distribution capacity.
7. Consumer Demand: Surveying consumers' preferences for local meat and willingness to pay a premium. A consumer survey would also be useful to assess if the COVID-19 events described have caused a structural or temporary change in local meat demand.

### Lessons Learned

A 2013 USDA study sums up the problem nicely: a lack of commitment and coordination along the entire supply chain is the primary reason local meat processing has not expanded (Gwin et al., 2013). Another study of 20 years of public investment into meat and poultry processing provides valuable tips on how to structure a comprehensive study and which investment projects are most likely to succeed (Gwin & Thistlethwaite, 2019). A holistic approach is needed to address the complex local meat supply chain, and a feasibility study that only addresses slaughter facilities is likely to fall short. While producers in South Carolina and across the U.S. are anxious to build additional meat-processing facilities, a well-designed supply chain study will likely provide more viable options for local meat producers, processors, and consumers.

**Table 1. Components of Past Feasibility Studies by Location and Year**

Study	Producer Supply	Aggregation & Logistics	Inspection Systems	Slaughter Capacity	Processing Capacity	Storage & Distribution	Consumer Demand
CT, 2008 <sup>a</sup>	Yes	No	Yes	Yes	Yes	No	No
WI, 2019 <sup>b</sup>	Yes	No	Yes	Yes	Yes	No	No
MI, 2014 <sup>c</sup>	No	No	Yes	Yes	Yes	Yes	No
Australia, 2017 <sup>d</sup>	Yes	Yes	N/A	Yes	Yes	Yes	No
NY, 2000 <sup>e</sup>	Yes	Logistics only	Yes	Yes	Yes	Yes	No
MD, 2006 <sup>f</sup>	Yes	Logistics only	Yes	Yes	Yes	Yes	No
VT, 2005 <sup>g</sup>	Yes	Yes	Yes	Yes	Yes	No	No
NC, 2012 <sup>h</sup>	Yes	No	Yes	Yes	Yes	No	Yes
MT, 2006 <sup>i</sup>	Beef only	Yes	Yes	Yes	Yes	Yes	Wholesale only
CA, 2009 <sup>j</sup>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
MA, 2013 <sup>k</sup>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
MI, 2007 <sup>l</sup>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
VA, 2014 <sup>m</sup>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
GA, 2019 <sup>n</sup>	Beef only	Yes	Yes	Yes	Yes	Yes	Yes

Notes: <sup>a</sup> Community Involved in Sustaining Agriculture [CISA], 2008; <sup>b</sup> Grooms, 2019; <sup>c</sup> Schwehofer, Wells, Miller, & Pirog, 2014; <sup>d</sup> Australian Competition & Consumer Commission, 2017; <sup>e</sup> Shepstone, 2000; <sup>f</sup> Shepstone, 2006; <sup>g</sup> Sleeping Lion Associates, 2005; <sup>h</sup> ASAP Local Food Research Center, 2012; <sup>i</sup> Food and Livestock Planning, 2006; <sup>j</sup> Hardesty et al., 2009; <sup>k</sup> Dickenson, Joseph, & Ward, 2013; <sup>l</sup> Knudson & Peterson, 2007; <sup>m</sup> Matson Consulting, 2014; <sup>n</sup> Wolfe, Shephard, & Kane, 2019

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