Meat Processing Plant
Types and Locations

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Slaughter Capacity & Retail Prices

- Comprehensive Beef Cutout (463)
- NE Fat Cash (Steer/Heifer Dressed)
- NE Comb. Auction Feeder Cattle (500-600 lb.)
- NE Comb. Auction Feeder Cattle (800-900 lb.)
- Retail (All Fresh Beef)
Four Broad Types of Meat Processing:

1. Inspected by the U.S. Department of Agriculture Food and Safety Inspection Service (USDA-FSIS)
2. Cooperative Interstate Shipping Program – a joint venture between the USDA and state meat inspection programs allowing qualified facilities to ship across state lines
3. State-run inspections in which the meat can only be sold within the state's boarders
4. Custom exempt facilities that are only inspected periodically – the meat is not labeled for sale and only the owner of the meat can consume it.
Information for My State

1. Federally Inspected
2. Cooperative Interstate Shipping Program
3. State Inspected
4. Custom exempt
   Private Lists or State Department of Ag. -> Participate in the Google Form for NE!
How many times in the last year did you use a custom exempt plant to harvest animals?
Federally Inspected Share of Production
Monthly Cattle and Calf Slaughter, 1950-2021
How Many Federally Inspected Plants in Nebraska?
# Processing Plants Surrounding Nebraska

<table>
<thead>
<tr>
<th>State</th>
<th>Very Small</th>
<th>Small</th>
<th>Large</th>
<th>N/A</th>
<th>Total</th>
<th>Beef</th>
<th>Pork</th>
<th>Meat</th>
<th>Poultry</th>
<th>Other Red</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado</td>
<td>76</td>
<td>41</td>
<td>2</td>
<td>6</td>
<td>125</td>
<td>25</td>
<td>19</td>
<td>22</td>
<td>1</td>
<td>97</td>
<td></td>
</tr>
<tr>
<td>Kansas</td>
<td>27</td>
<td>25</td>
<td>7</td>
<td>14</td>
<td>73</td>
<td>23</td>
<td>17</td>
<td>14</td>
<td>1</td>
<td>50</td>
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<tr>
<td>Iowa</td>
<td>21</td>
<td>96</td>
<td>26</td>
<td>0</td>
<td>143</td>
<td>4</td>
<td>19</td>
<td>1</td>
<td>2</td>
<td>119</td>
<td></td>
</tr>
<tr>
<td>Missouri</td>
<td>84</td>
<td>55</td>
<td>13</td>
<td>11</td>
<td>163</td>
<td>42</td>
<td>36</td>
<td>28</td>
<td>11</td>
<td>108</td>
<td></td>
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<tr>
<td>Nebraska</td>
<td>35</td>
<td>50</td>
<td>15</td>
<td>13</td>
<td>113</td>
<td>30</td>
<td>20</td>
<td>15</td>
<td>2</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>South Dakota</td>
<td>9</td>
<td>15</td>
<td>4</td>
<td>1</td>
<td>29</td>
<td>6</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Wyoming</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>7</td>
<td>4</td>
<td>5</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Source: USDA-FSIS Database (2021), Author Compiled
Federally Inspected Plants Near Nebraska
All Types, Sizes and Commodities
Type of Plants By Location in Nebraska

Beef

Pork

Other Red Meat

Poultry
Size of Plants By Location in Nebraska
Emerging Issues

Resilience vs Efficient

Novel Programs: Herd share
- Custom exempt plants Google Form
- NE only has FI and CE type plants

Grant Funding
- Webinar on Thursday

Plant Profitability
- Construction vs. cattle cycle
Meat Processing Plant Types and Locations

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Financial Concerns

Starting a New Meat Processing Facility
The Nebraska Business Development Center (NBDC) is a resource for small business creation and expansion.
Things to Consider
“Research & Planning”

• Be Prepared!!!
  • Solid foundation

• Know Your Business
  • Type of Facility
  • Type of Inspection
  • Type of Livestock
  • Type of Structure

• Know Your Market
  • Better Understanding (refine)
    • Supply & Demand

• Develop a Plan
  • Critical Decision Making
  • Work Out Kinks
  • Prepares For Mistakes
  • Proves Viability
  • Sets Objectives/Benchmarks
  • Securing Financing
  • Reduces Risk
  • Obtain Assistance/Resources
Financial Considerations

- It takes significant infrastructure to run these businesses
  - Steady volume to support it
- Good relationships between producers & processors to support them
  - Reward them with business
  - Continued investment
- The business can be complex & high risk
  - Costs $1M or more ($300-$400/sq ft on avg)
- Productivity, revenue, and services offered are all interconnected
Example of Different Operations

### These three examples – based on real processors – show the level of service three different plants can offer, based on how much livestock they process.

<table>
<thead>
<tr>
<th>Very Small Custom-Exempt</th>
<th>Small Inspected</th>
<th>Regional Inspected</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,000 Sq. Ft. facility</td>
<td>4,000Sq. Ft. facility</td>
<td>15,000 Sq. Ft. facility</td>
</tr>
<tr>
<td>Slaughters/cuts beef, pork, sheep, goat</td>
<td>USDA or State-inspected; maybe also custom-exempt</td>
<td>All products USDA-inspected</td>
</tr>
<tr>
<td>Limited sausage making, smoking, curing services</td>
<td>Slaughters/cuts beef, pork, sheep, goat</td>
<td>Regular 3rd-party audits (GMPs, food safety, animal welfare, certified organic)</td>
</tr>
<tr>
<td>All raw meats packaged in butcher paper and frozen</td>
<td>Sausage making, smoking and curing services</td>
<td>QA dep’t monitors sanitation, product safety, quality, shelf life via microbial testing, sensory evaluation</td>
</tr>
<tr>
<td>Option for some vacuum packaging for cooked sausages</td>
<td>All raw meats packaged in butcher paper and frozen</td>
<td>Slaughters/cuts beef, pork</td>
</tr>
<tr>
<td>No scale labeling (applying labels with actual weight to packages or cases)</td>
<td>Vacuum pack cooked sausage, boneless cured meats</td>
<td>Sausage making, smoking and curing services, exact weight retail portions</td>
</tr>
<tr>
<td>4 FTE employees</td>
<td>Very basic scale labeling</td>
<td>Exact weight portion cutting of steaks and roasts</td>
</tr>
</tbody>
</table>

- All raw and cooked meats are vacuum packaged fresh or frozen, usually Thermoformed roll stock for retail sale
- Complex scale labeling for pieces, cases
- 4-color preprinted labels applied uniformly to packages
- Most product boxed, palletized to ship
- 60 FTE employees
- Offers health insurance & retirement benefits
Cost Analysis

20 head per week facility (New)
• 2,000-3,000 sq ft plant
• $300-$400 per sq ft
• Permits
• Site prep
• Utilities
• Building
• Refrigeration
• Other costs

All-in costs to slaughter/process
Beef - $500 per head
Pig - $150 per
Lamb - $120 per

Add in approx. 35% for taxes, interest, and deprec.
$675 per head
Thank You!!!

For additional information about NBDC and our services, go to: https://www.unomaha.edu/nebraska-business-development-center/index.php

Or Contact me personally:

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Developing a Meat Processing Plant: Regulatory Aspects
October 12, 2021 webinar

J. David Aiken, Professor
UNL Water & Ag Law Specialist
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1906 Upton Sinclair, *the Jungle*: detailed unsanitary conditions in the meat packing industry

1906: Congress, at urging of President Theodore Roosevelt, enacted Meat Inspection Act

main purpose of act was to **improve sanitary conditions of meat slaughter and processing**

**food safety** is still main objective of Meat Inspection Act

Act administered by USDA Food Safety & Inspection Service (FSIS)
livestock slaughter rules

- federal inspections (USDA) – major processors
- state inspection – Nebraska does not have
- custom exempt – local meat lockers
- retail exempt: subject to periodic USDA/state* inspection
  - **meat must come from USDA/state* inspected packer**
- **USDA/state* inspected**: must have HACCP (food safety) plan
  - SSOP sanitation standard operating procedures plan
  - recall plan
  - daily USDA/state* inspection of processing facilities
- for red meat: **daily inspection of each animal before & after slaughter**
USDA/state* inspected, con’t

- USDA/state* inspected meat products can be shipped over state lines and (USDA inspected) internationally to many countries
- may be sold to grocery stores, restaurants, etc.
- graded USDA prime etc.
- most if not all major packers are USDA inspected
- USDA pays inspectors for 40 hour week; packer must pay for any extra inspection (overtime pay, holiday pay)
- state* inspection programs must meet all USDA requirements
- state*-inspected processors must meet all USDA requirements (HACCP, SSOP, recall plan, etc.)
- USDA does not pay for any state* inspectors
custom exempt processors

- local meat lockers are an example of custom exempt facilities – process game animals for hunters, etc.
- custom-exempt facility can only slaughter & process livestock for the exclusive use of the livestock owner(s), their household, non-paying guests or their employees
  - meat products cannot be sold
- facilities are subject to periodic inspections by USDA and/or state authorities
custom exempt, con’t

- In practice, producers may sell portions of an animal (ex: 1/4 steer, 1/2 hog) to several consumers while the animal is still alive. At that point, the consumers become co-owners of that animal.

- Once the animal is completely sold the livestock seller may act as an agent to arrange transportation to the slaughter & processing facility.

- Each individual consumer/owner is then responsible for choosing how the animal should be processed, as well as paying both the livestock seller (for the animal) and the processing facility (for the processing).
custom exempt, con’t

- Products that have been slaughtered and processed based on custom exempt guidelines may not be sold or donated.

- Wyoming has a state law allowing livestock owners to transfer “herd shares” to live animal buyers in attempt to qualify for custom exempt status for processors of “herd share” animals

- USDA FSIS (food safety inspection service) is working with Wyoming officials to evaluate the legal validity of the herd share program

- Nebraska adopted a herd share law in 2021 patterned after Wyoming herd share program.
Niche Meat Processor Assistance Network – information for those interested in small-scale meat processing

“A national network and information hub for smallscale meat and poultry processors and the farmers and ranchers who depend on them to get their product to market.”

www.nichemeatprocessing.org