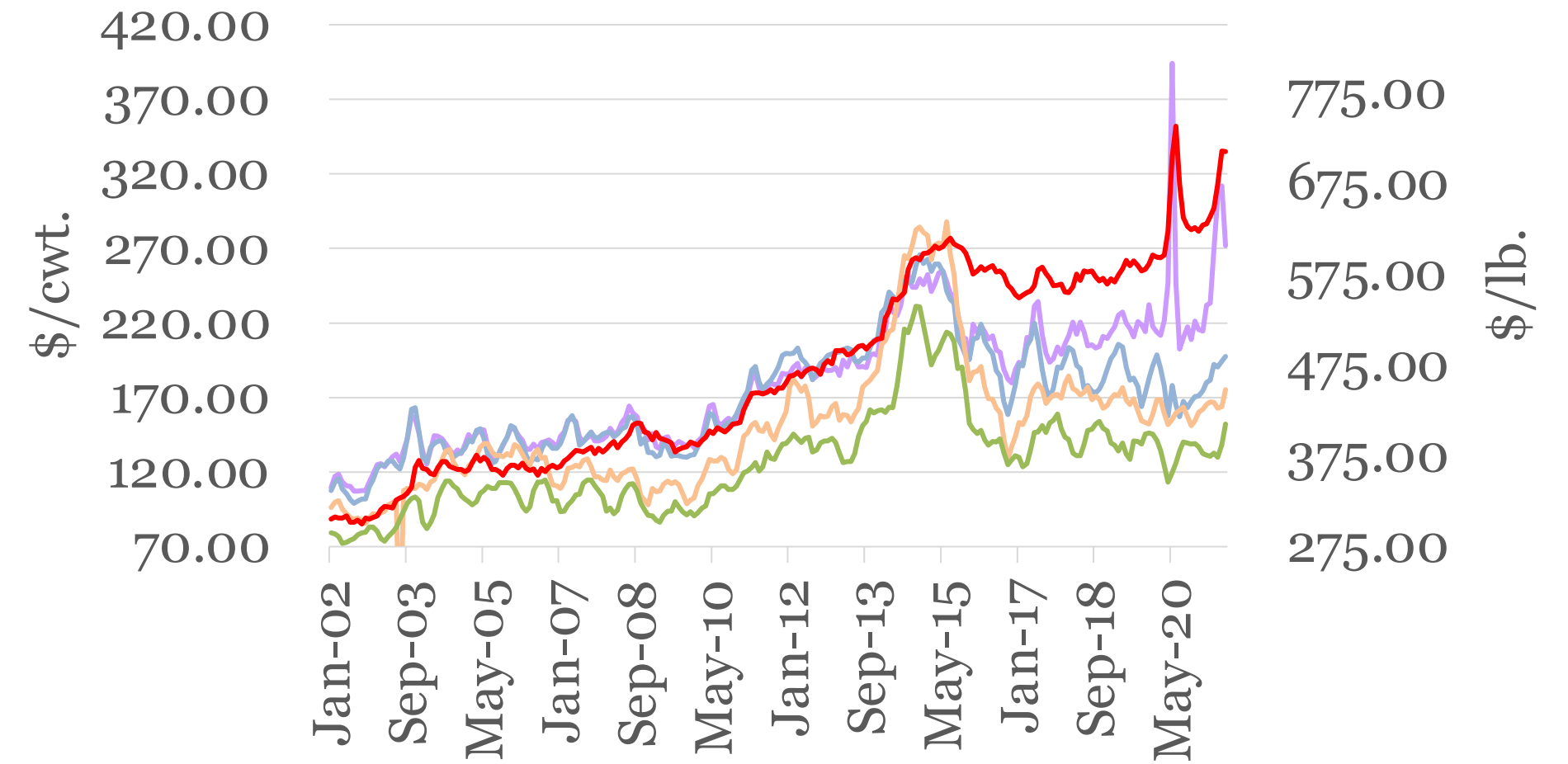
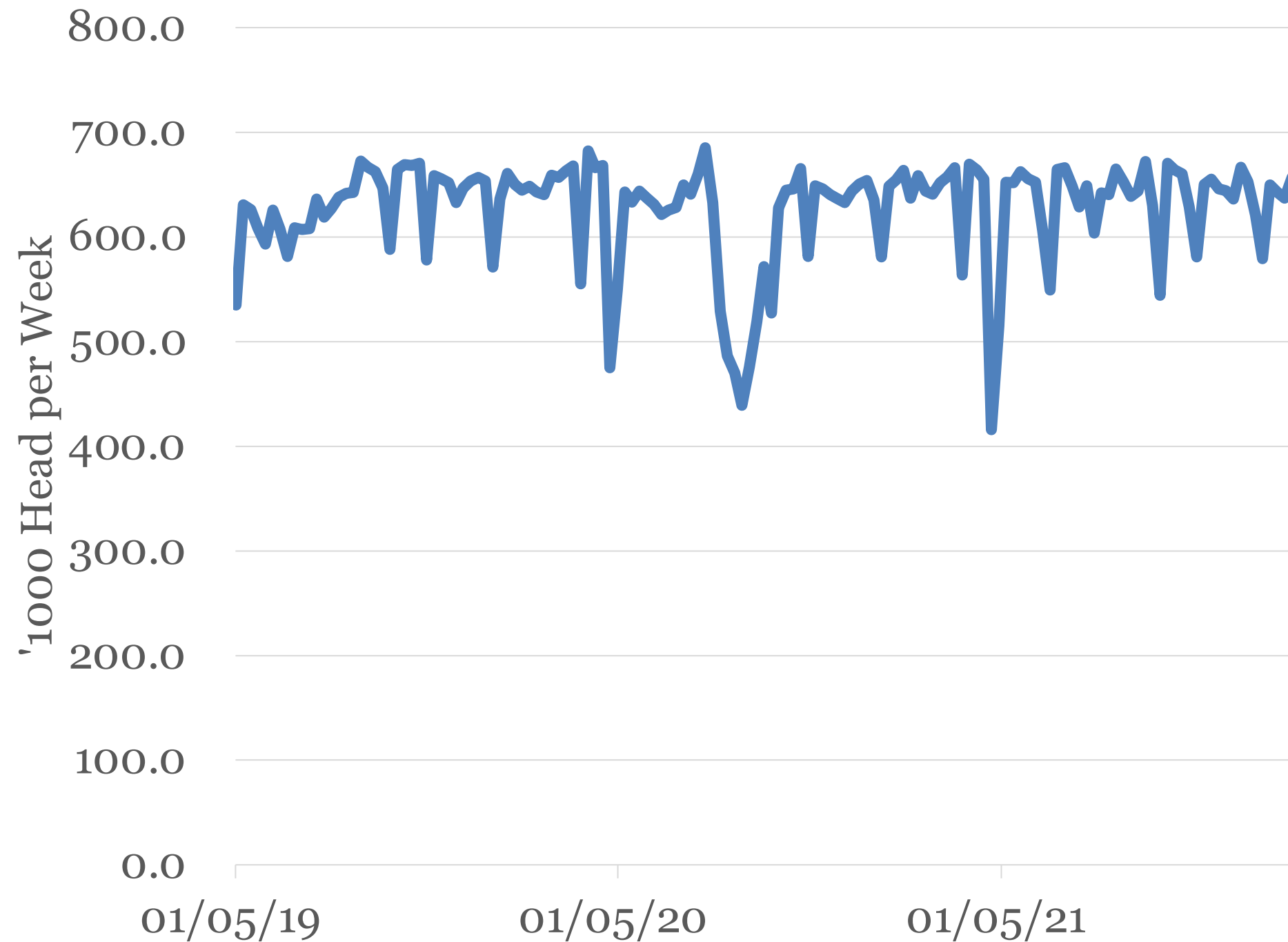


# Meat Processing Plant Types and Locations

Elliott Dennis  
Livestock Risk Management  
[elliott.dennis@unl.edu](mailto:elliott.dennis@unl.edu)  
402-472-2164

# 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)



# Types of Processing Plants

## **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 borders
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  
<https://www.fsis.usda.gov/inspection/establishments/meat-poultry-and-egg-product-inspection-directory>
2. Cooperative Interstate Shipping Program  
<https://www.fsis.usda.gov/inspection/apply-grant-inspection/state-inspection-programs/cooperative-interstate-shipping-program>
3. State Inspected  
<https://www.fsis.usda.gov/inspection/apply-grant-inspection/state-inspection-programs/states-and-without-inspection-programs>
4. Custom exempt  
Private Lists or State Department of Ag. -> Participate in the Google Form for NE!

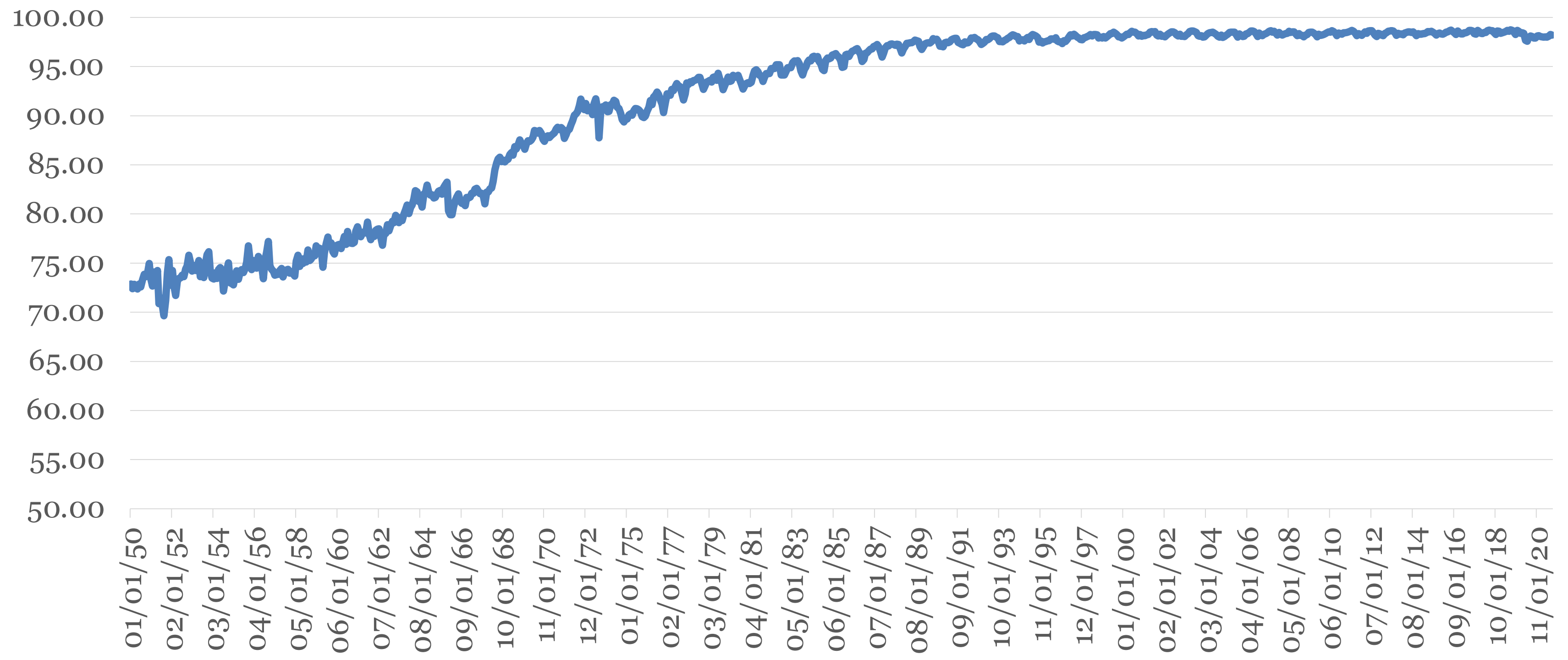


How many times in the last  
year did you use a custom  
exempt plant to harvest  
animals?



# Federally Inspected Share of Production

## Monthly Cattle and Calf Slaughter, 1950-2021



# How Many Federally Inspected Plants in Nebraska?



# Processing Plants Surrounding Nebraska

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

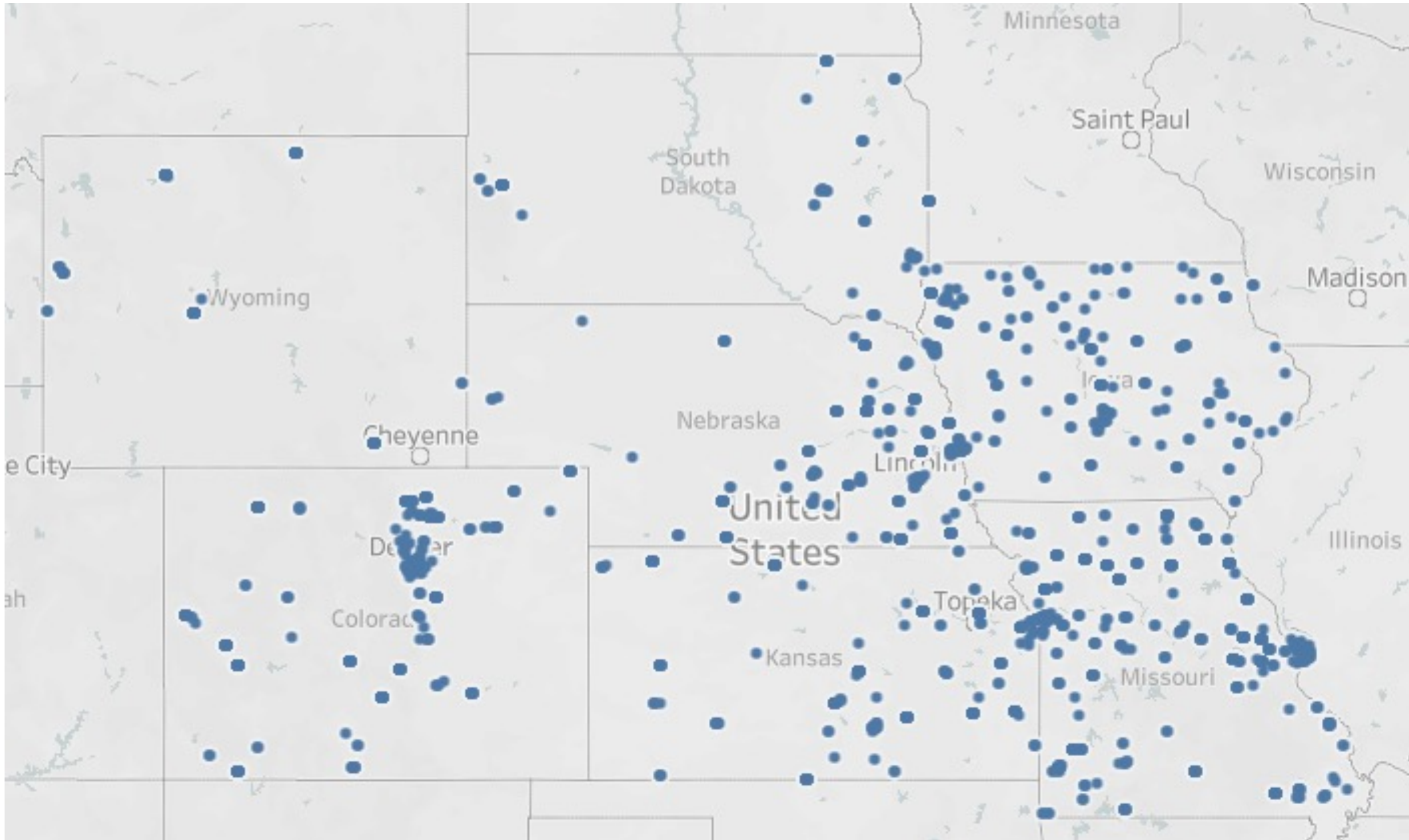
Source: USDA-FSIS Database (2021), Author Compiled





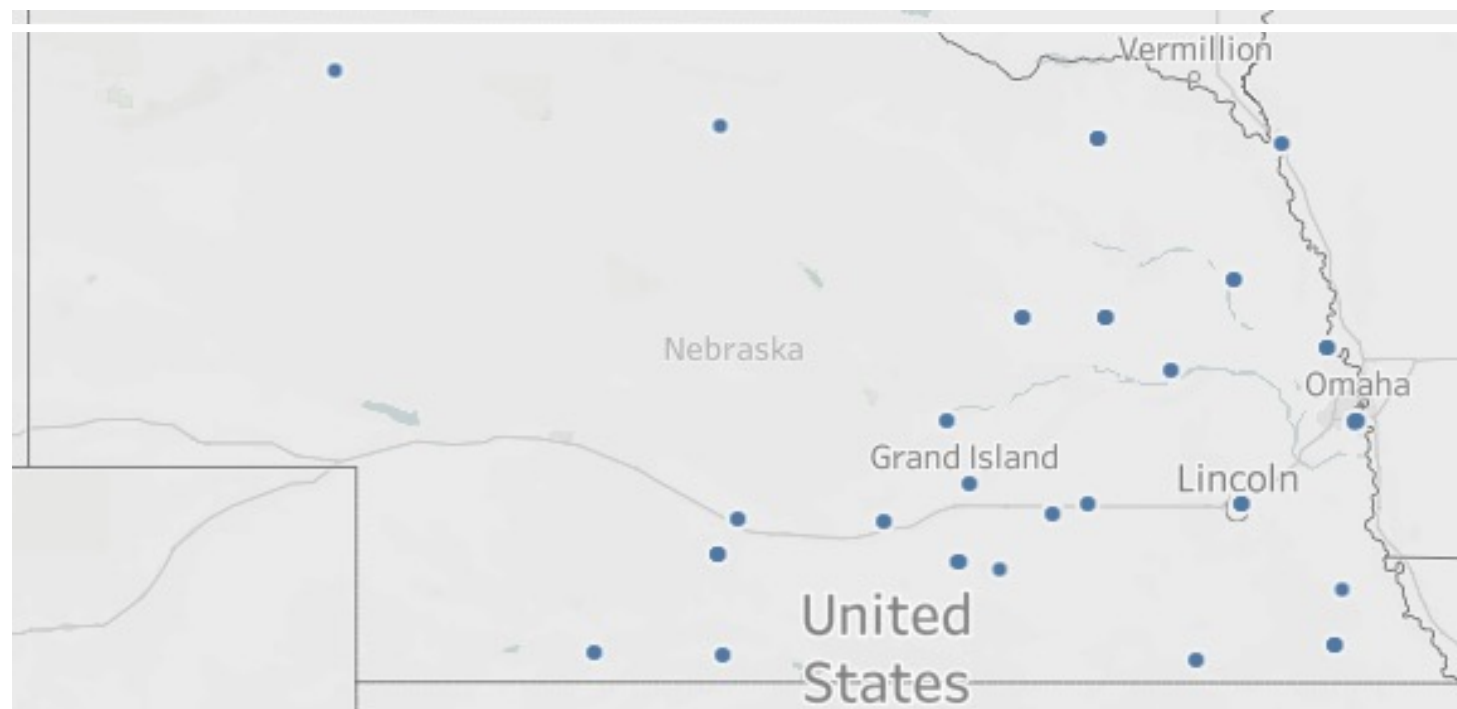
# Federally Inspected Plants Near Nebraska

All Types, Sizes and Commodities

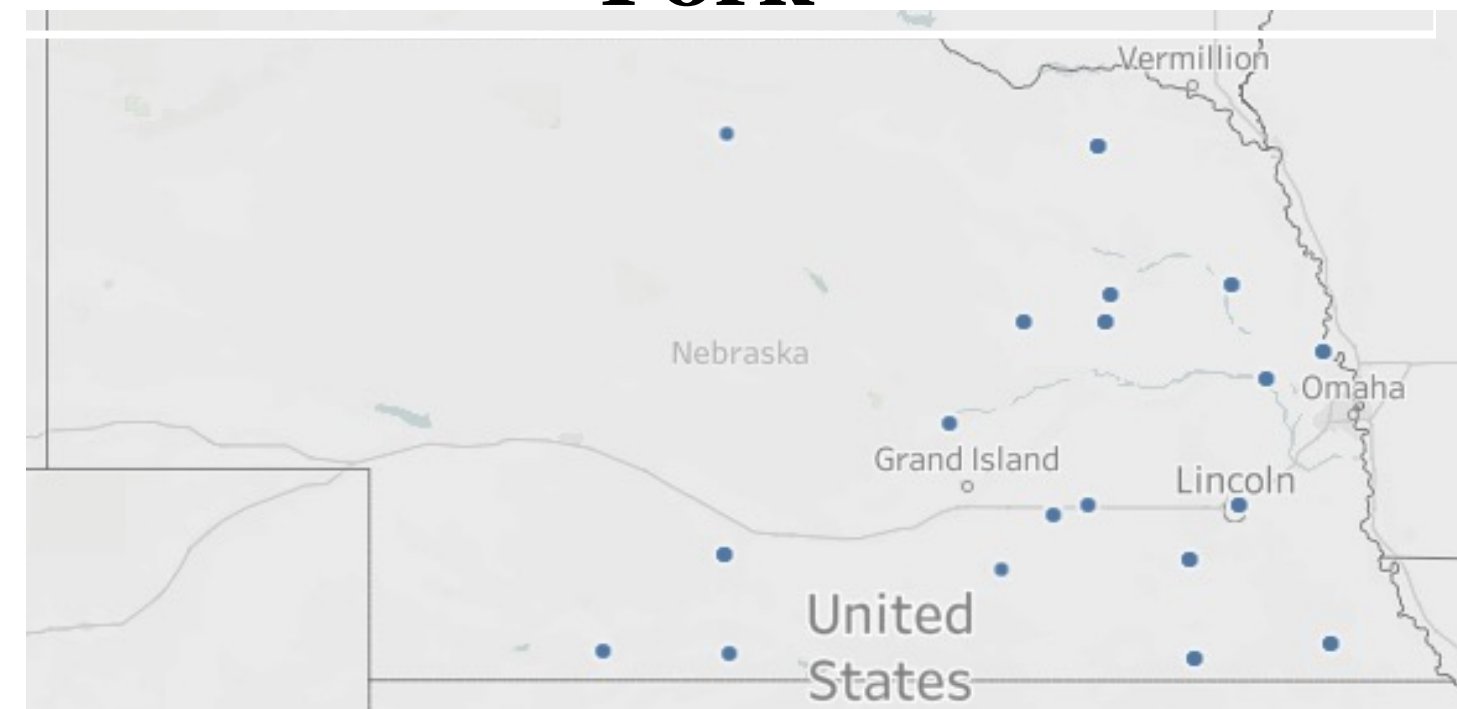


# Type of Plants By Location in Nebraska

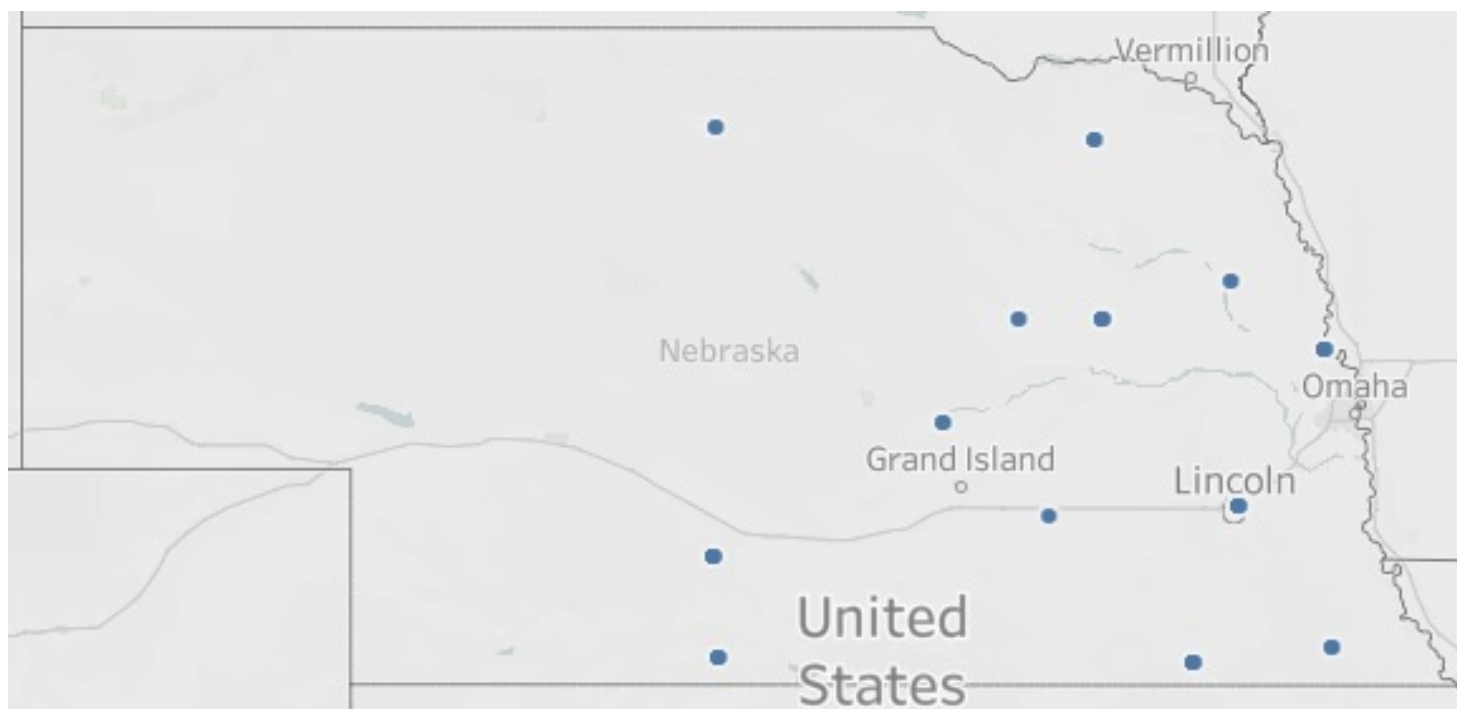
**Beef**



**Pork**



**Other Red Meat**

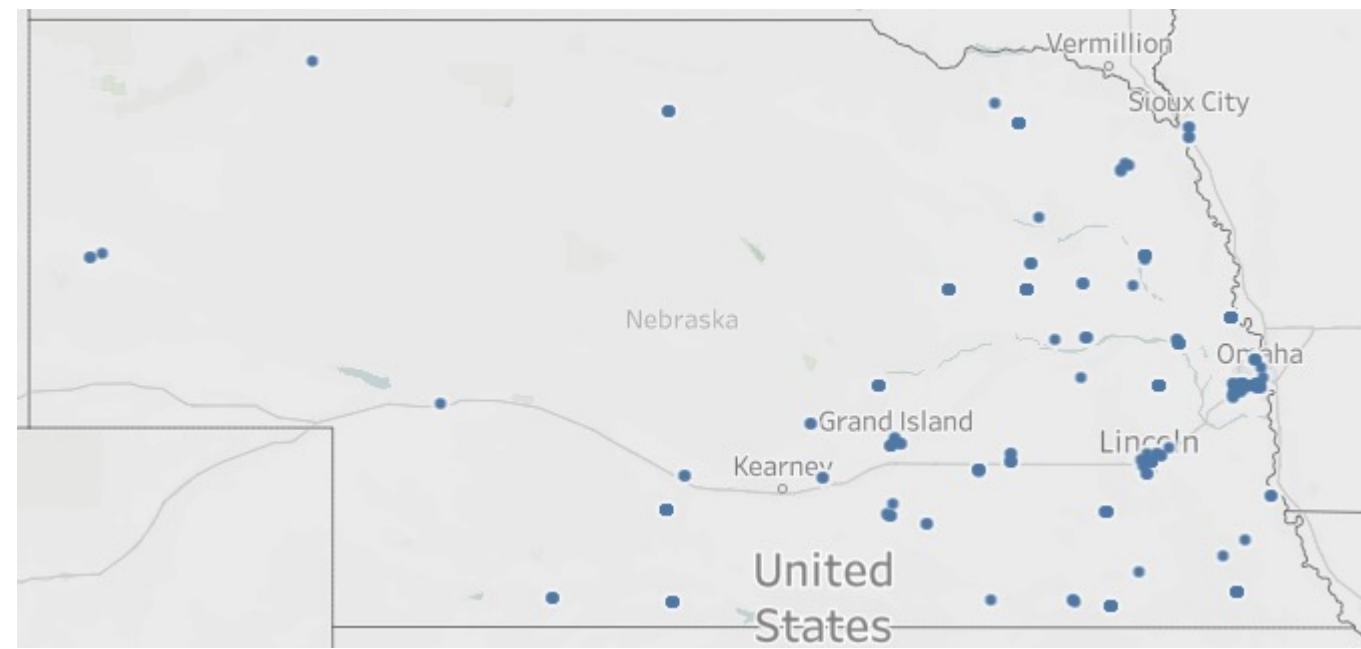


**Poultry**

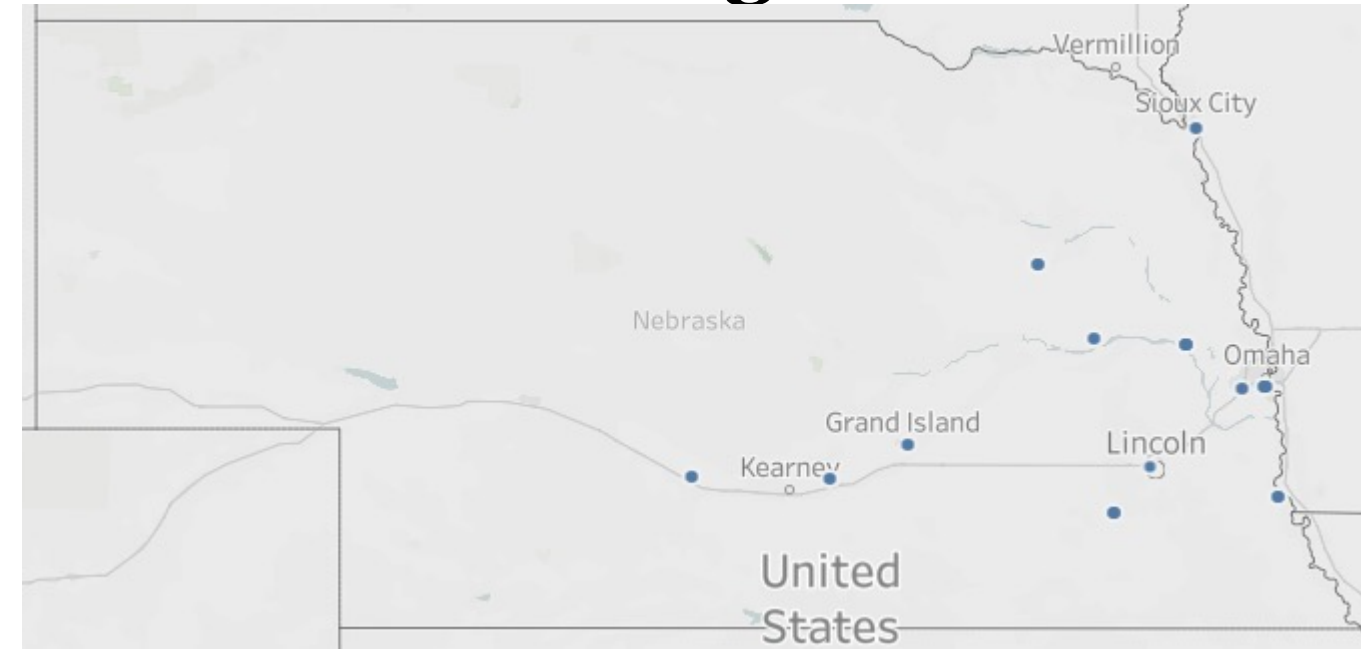


# Size of Plants By Location in Nebraska

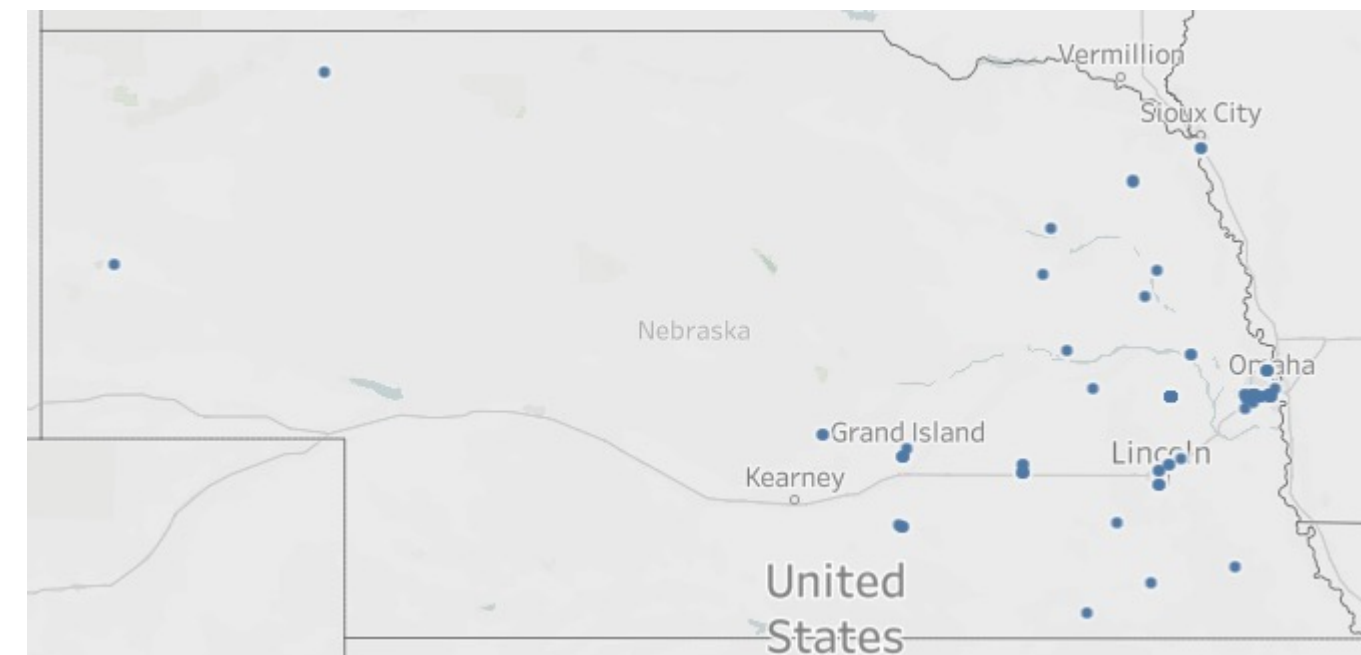
**All Sizes**



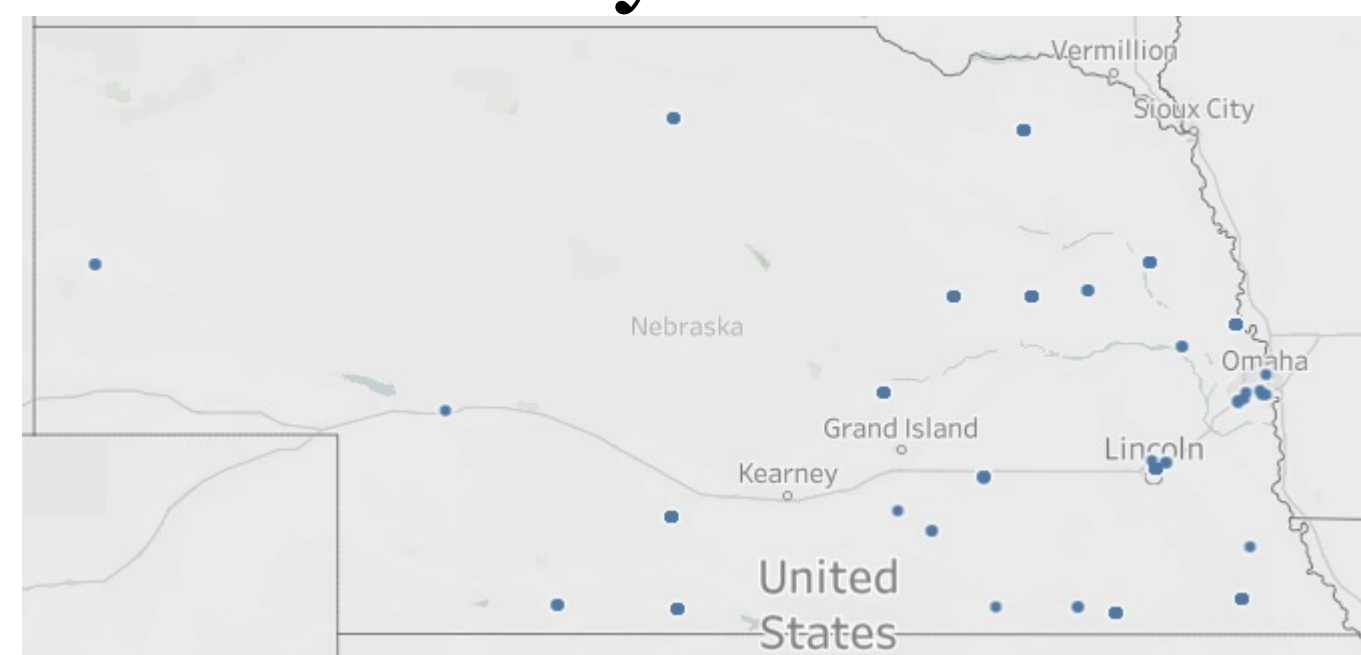
**Large**



**Small**



**Very Small**



# 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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402-472-2164

# Financial Concerns

Starting a New Meat Processing Facility

***nbdc***<sup>®</sup>

NEBRASKA BUSINESS DEVELOPMENT CENTER

UNIVERSITY OF  
**Nebraska**  
Omaha



COLLEGE OF BUSINESS ADMINISTRATION

# Charlie McPherson, MBA, EDFP

## North Platte & McCook NBDC Center Director

The Nebraska Business Development Center (NBDC) is a resource for small business creation and expansion.

***nbdc***<sup>®</sup>



# 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.**

## Very Small Custom-Exempt

- 2,000 Sq. Ft. facility
- Slaughters/cuts beef, pork, sheep, goat
- Limited sausage making, smoking, curing services
- All raw meats packaged in butcher paper and frozen
- Option for some vacuum packaging for cooked sausages
- No scale labeling (applying labels with actual weight to packages or cases)
- 4 FTE employees

## Small Inspected

- 4,000 Sq. Ft. facility
- USDA or State-inspected; maybe also custom-exempt
- Slaughters/cuts beef, pork, sheep, goat
- Sausage making, smoking and curing services
- All raw meats packaged in butcher paper and frozen
- Vacuum pack cooked sausage, boneless cured meats
- Very basic scale labeling
- 10 FTE employees

## Regional Inspected

- 15,000 Sq. Ft. facility
- All products USDA-inspected
- Regular 3rd-party audits (GMPs, food safety, animal welfare, certified organic)
- QA dep't monitors sanitation, product safety, quality, shelf life via microbial testing, sensory evaluation
- Slaughters/cuts beef, pork
- Sausage making, smoking and curing services, exact weight retail portions
- Exact weight portion cutting of steaks and roasts
- 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:

Charlie McPherson

North Platte & McCook NBDC Center Director

(308) 340-0422

[cmcpherson@unomaha.edu](mailto:cmcpherson@unomaha.edu)





# Developing a Meat Processing Plant: Regulatory Aspects

October 12, 2021 webinar

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J. David Aiken, Professor  
UNL Water & Ag Law Specialist

[daiken@unl.edu](mailto:daiken@unl.edu)



# history

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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

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- 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

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- 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

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- 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

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- 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

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- 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.



## for more information

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- 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](http://www.nichemeatprocessing.org)