## Current and Imminent Data Collection Challenges Faced by Statistical Agencies

June 27, 2011

**United States Department of Agriculture National Agricultural Statistics Service** 





#### Remarks

- What is the situation in the United States?
- What are some of the challenges and opportunities in working with farms with these attributes?
- What do our Field Offices report about engaging these key operations?
- Why this topic is important for an Agricultural Statistics Agency.

## Causes and Characteristics of Complexity

From "Complex Agricultural Establishments"

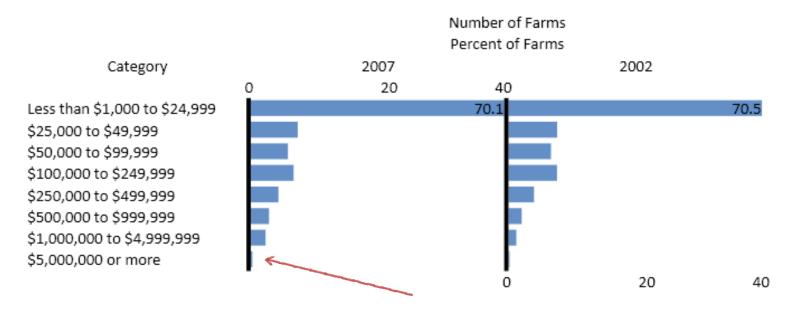
- Many complexities are associated with the size of establishments.
- Some Suggested Attributes:
  - Production contracts
  - Marketing contracts
  - Vertical integration
  - Dispersed asset ownership, management, and returns,
  - Use of farmland (Land management companies),
  - Output sales discovery for open market sales (e.g. cooperatives)

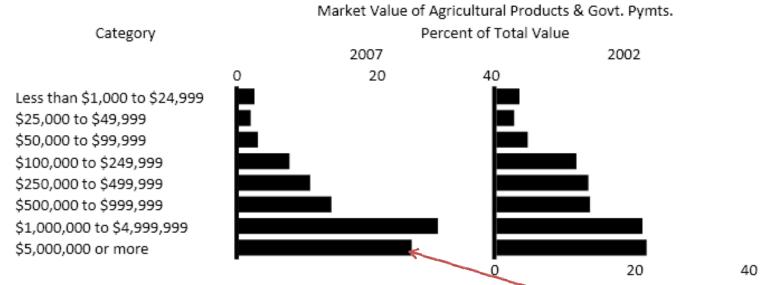
# The Situation in the United States with Regard to Collection of Agricultural Statistics from Complex Farming Operations





#### 2007 & 2002 Census of Agriculture Market Value of Agricultural Products Sold and Government Payments 1/





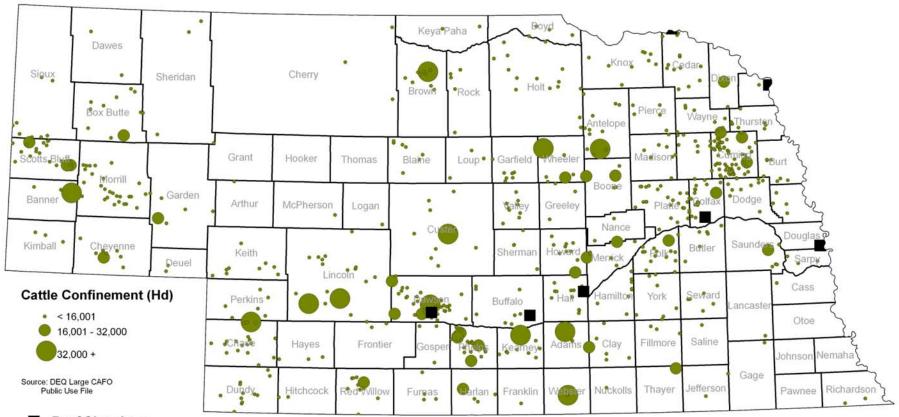
1/ 2007 Market Total Market Value of Sales was 305 Billion from 2.205 million farms; 2002 Market Total Market Value of Sales was 207 Billion from 2.129 million farms.

#### Nebraska Cattle

Concentrated Livestock Feeding Operations by Size





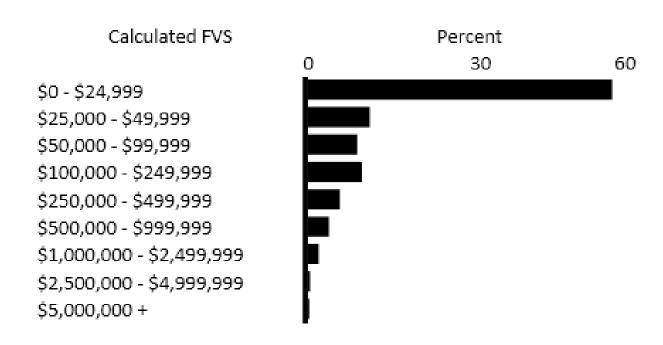


Beef Slaughter

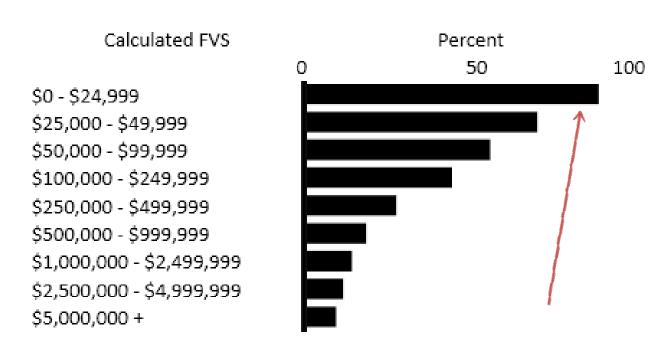
Source: USDA APHIS

0 75 150 300 Mile

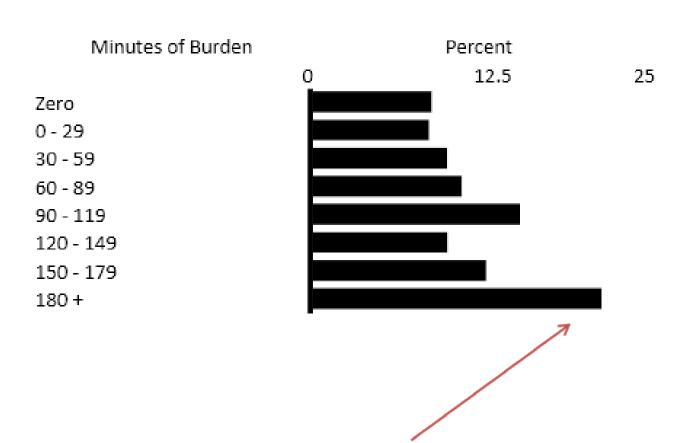
## Composition of Active NASS List Frame Records By Calculated Farm Value of Sales Spring 2011



## Proportion of Active NASS List Frame Records With Zero Calculated Response Burden Spring 2011

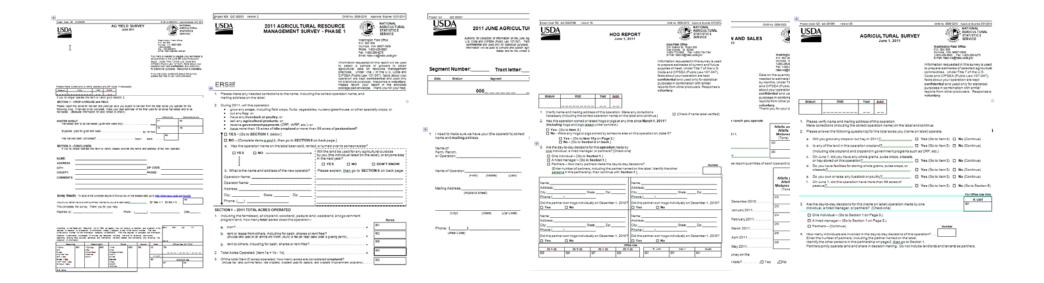


#### Proportion of Calculated \$5,000,000+ Operations by Minutes of "Burden" Spring 2011

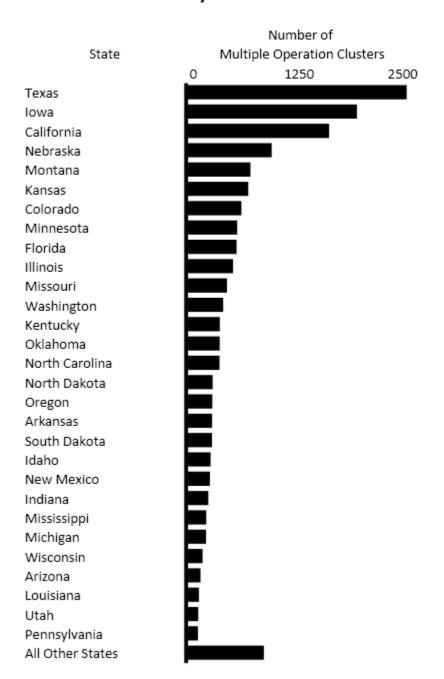


#### Survey Management System Survey Coordinator Matrix

Survey	A agyld06	B arms1	C bienhy11	D cof	E hopgwr	F jes2011	G jesnew	H onijun11	l potgro11	J qas_06	K varty11
B - arms1		3113	398	5	23	144	45	28	103	747	1193
C - bienhy11			1066	2	3	47	20	15	68	461	524
D - cof				12	0	2	0	1	2	7	2
E - hopgwr				1	49	3	0	0	3	9	8
F - jes2011				1		1841	12	7	18	101	159
G - jesnew							98	0	9	36	56
H - onijun11								83	25	42	33
- potgro11				1					225	209	133
J - qas_06				1						1724	969
K - varty11											2117



#### Number of Multiple Operation Clusters by State



#### An Illustration





"We offer three levels of consulting swine services. At each level our consulting veterinarians can help you make important choices about animal health, animal comfort, and ways to make your operation profitable.

#### **Swine Production and Health Supervision**

Veterinarians work as consultants to proactively avert herd health problems and encourage financial success through...

Health programs, production record-keeping, monthly assessments, and marketing education.

#### **Swine Production Management**

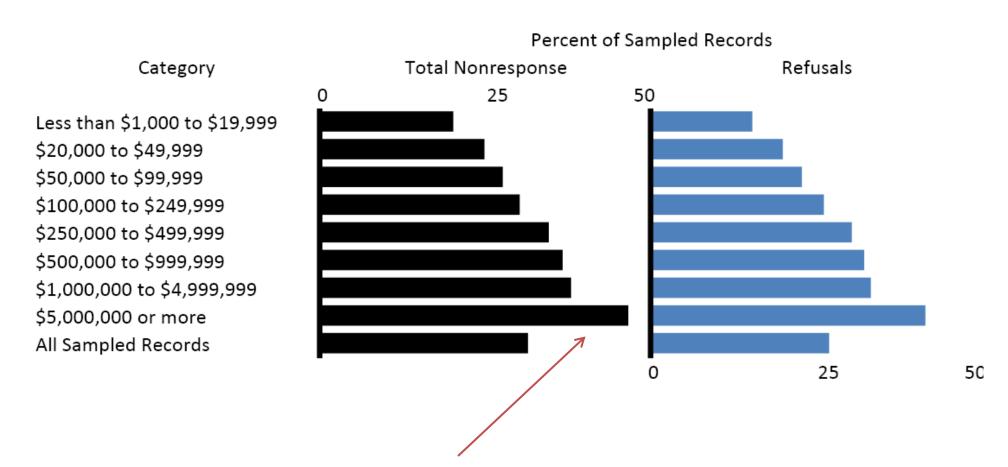
We will oversee production activities including...

Health programs, production record-keeping, monthly assessments, marketing education, nutrition programs, barn employees, (through our EMP SERV, LLC division), along with trucking and logistics.

**Full Service Swine Management** Our professional team will supervise all aspects of an operation for a busy crop farmer or investor, including...

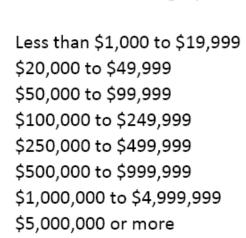
Health programs, production record-keeping, monthly assessments, marketing education, nutrition programs, barn employees, (through our EMP SERV, LLC division), along with trucking and logistics, complete financial oversight, and marketing."

#### 2009 Agricultural Resource Management Survey Nonresponse Rates by List Sample Frame Calculated Value of Sales

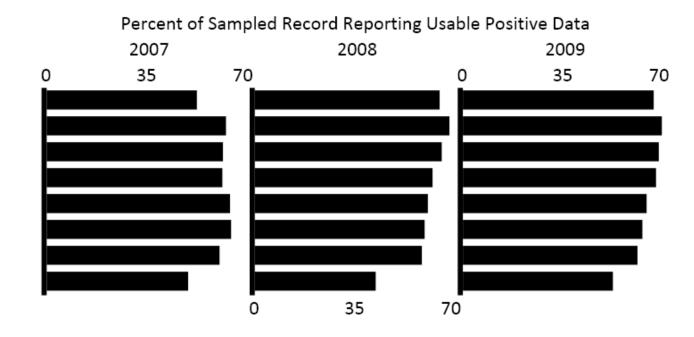


#### 2007 - 2009 Agricultural Resource Management Survey Usable Positive Rates

by List Sample Frame Calculated Value of Sales



Category



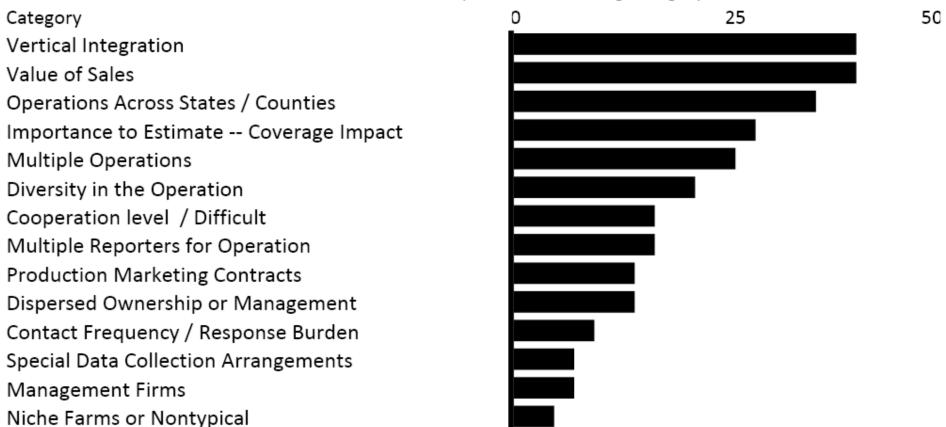
## Perceptions of Field Office staff regarding complex farming operations





#### What criteria do you think are most important in determining if an operation is "Complex"?

Percent of Field Office Responses Mentioning Category



1/ All Forty-six field offices responded, forty-two provided a codeable response to the question. Open responses were coded into all categories mentioned.

#### What are the criteria you use to decide to have special handling or special engagement of a specific operation?

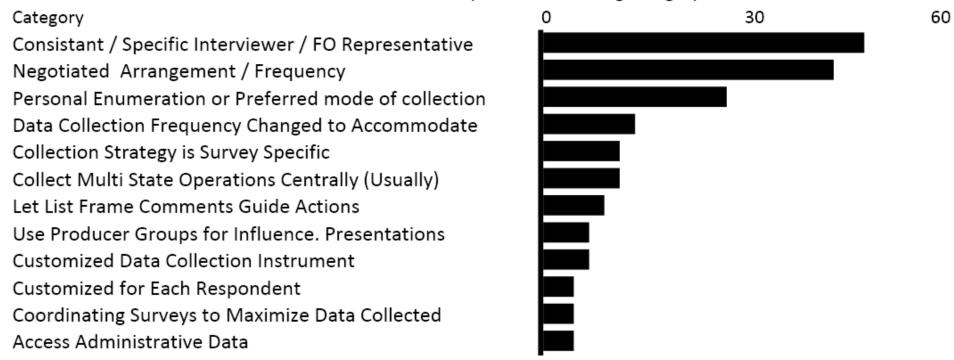
Percent of Field Office Responses Mentioning Category

Category 50 25 VOS / Relative Size in Commodity Prior Pattern of Refusals / Complaints Comment on List Frame / Prior Agreements Prior Difficulty in Completing the Questionnaire High No. Contacts / High Burden Verticaly Integrated, Contractor Contractee Supervisor / Enumerator Recommendation Requested by Operator In many surveys simultaneously **Operates Multiple Operations** Multiple Contacts for Operation Criteria is Survey Specific Multi State / Multi - County

1/ All Forty-six field offices responded, forty-three provided a codeable response to the question. Open responses were coded into all categories mentioned.

#### Please describe your data collections strategies for these operations

Percent of Field Office Responses Mentioning Category



1/ All Forty-six field offices responded, forty-four provided a codeable response to the question. Open responses were coded into all categories mentioned.

#### Do you feel there is a need for a more comprehensive or coordinated approach across the US to data collection and engagement of these operations? 1/

Percent of Field Office Responses Mentioning Category Category 80 40 Percent of Answers Reporting... 2/ Yes Nο Percent of "Yes" Answers Reporting... Share Best Practices General Guidelines / Standard Policy Multi-State Should be formalized / Managed Could provide Focus and Expertise / Consistancy Various Answers Supporiting "Yes" 3/ Percent of "No" Answers Reporting... Keep it local Unique / Regions / Case-by-Case Trust and Rapport Various Answers Supporiting "No" 4/

- 1/ All Forty-six field offices responded, forty-one provided a codeable response to the question. Open responses were coded into all categories mentioned.
- 2/ Some responses included statements supporting local control and a coordinated approach. Reasons supporting each position were coded.

#### Why is this Topic Important to an Agricultural Statistics Agency?

Complex agricultural operations

...do not always "fit"

...may have different costs and errors

...small part of the population, large portion of many estimates

...many vying for attention of firm

...key consumers of statistical information.

...expect special handling

...have many touch points

... are key influencers

...complexity may be situational or constant

...need specific engagement strategies

#### Your Questions