DATA IN AGRICULTURE
Machine Data Generation - Today

- As-Applied Files (.shp)
  - Spraying (0.3 MB/ac)
  - NH₃ application (4.3 MB/ac)
  - Planting (5.5 MB/ac)
- Yield Data (4.3 MB/ac)
- Prescription Files (0.01 MB/ac)
- Soil/Fertility Data (0.6 MB/ac)
- Total - 0.5 KB/plant
Image Data Generation - Future

- 24 bits per pixel
- 2.0 cm/pixel
- 5 overflights/season
- 4.6 kB/plant of image data
Producer Concerns

- Privacy and security
- Limited access to their data – contained in proprietary message (CAN) formats
- Loss of control once data is uploaded to the cloud – uncertain of how data will be used
- Aggregators of producer data will use it to control markets
- Unlikely to share in value of data
- Government access
WHY SHOULD YOU CARE?
The “Big Data” Impact

- Farming practices are digitized.
- Growers capture precise field boundaries.
- The USDA is thinking about it ... you should think about it.
  - USDA programs can be based on precise acres.
  - It’s a tradeoff between premium and indemnity.
    - Insured acres will decrease
    - Revenue will change
    - Loss will be impacted
- Unknown and no direct correlations can be drawn ... yet.
- It brings some uncertainty to the future figures, less predictability.
2013 FSA 578

CLU
52.75 planted (96.3%)
1.51 unplanted (3.7%)

CLU 0
.54 planted
7.93 unplanted

2013 Actual Planting Data
2013 FSA 578

CLU
10.35 planted (77.3%)
3.05 unplanted (22.7%)
Thank You

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