Consolidated Notes from Unmanned Aerial Systems Sector Workshop
August 30, 2016

Objectives

- **Become the center for UAS technology and expertise**
- **Attract manufacturing and assembly**

- Achieve a top five rank nationally for UAS sales and economic activity
- Achieve balanced commitment from state government, industry and academia
- Achieve additional investment in the industry
- Achieve x% of UAS penetration in our Kansas farm systems to lead by example
- Advance the industry to stay ahead of the competition

Barriers

- **Privacy and biosecurity concerns exist**
- **Data manipulation and management cannot be executed quickly, or there may not be a way to interpret the data**
- **Need algorithms to be able to interpret data**
- **Return on investment for farmers cannot yet be demonstrated**
- **Regulatory uncertainty as states and local governments try to impose additional regulations. New regulations should be reasonable**

- Users are not quite sure how to understand the equipment and data
- Lack of use case examples
- Open source data management
  - Management of variables by a UAV alone can only get one or several data points. The data needs to be linked and centralized
- UAV itself is the limiting capacity – need to develop ways to get more info out of equipment that can be attached to UAV with a limited payload
- Public perception is inhibitory to acceptance of use
  - Need to narrate the benefits of how the technology supports other public priorities like water, sustainability, productivity, etc.

Opportunities & Advantages

- **Use of big data to manage crop inputs, in real-time and as a database (seeding, fertilizer, water)**
- **Partner with Kansas ag equipment manufacturers**
- **Capitalize on Wichita aviation and new aviation clusters**
- **Develop partnerships with military and former military with excellent expertise**
  - **Utilize existing and potential infrastructure**

- **Leverage Fort Riley, Fort Leavenworth, McConnell AFB**

- Applications in animal agriculture or for wildlife management
  - Examples:
    - Thermal scanning of fields to identify wildlife (deer) to avoid combine damage during harvest.
    - Use as a wildlife deterrent
- Develop more fully active AUVSI chapter
- Analytical nodes and distribution