



IOWA STATE UNIVERSITY

ISU and Food Hub Collaboration in Iowa

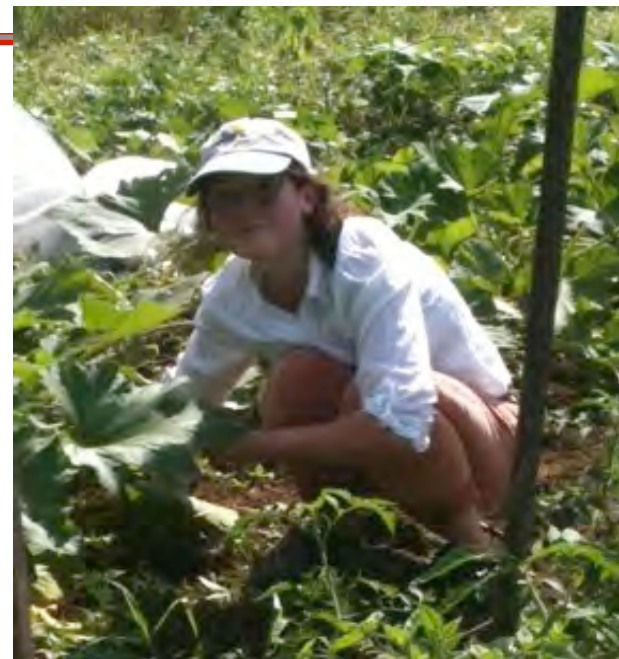
Webinar for MI Food Hub Network

June 15, 2016



LEOPOLD CENTER
FOR SUSTAINABLE AGRICULTURE

IOWA STATE UNIVERSITY
University Extension



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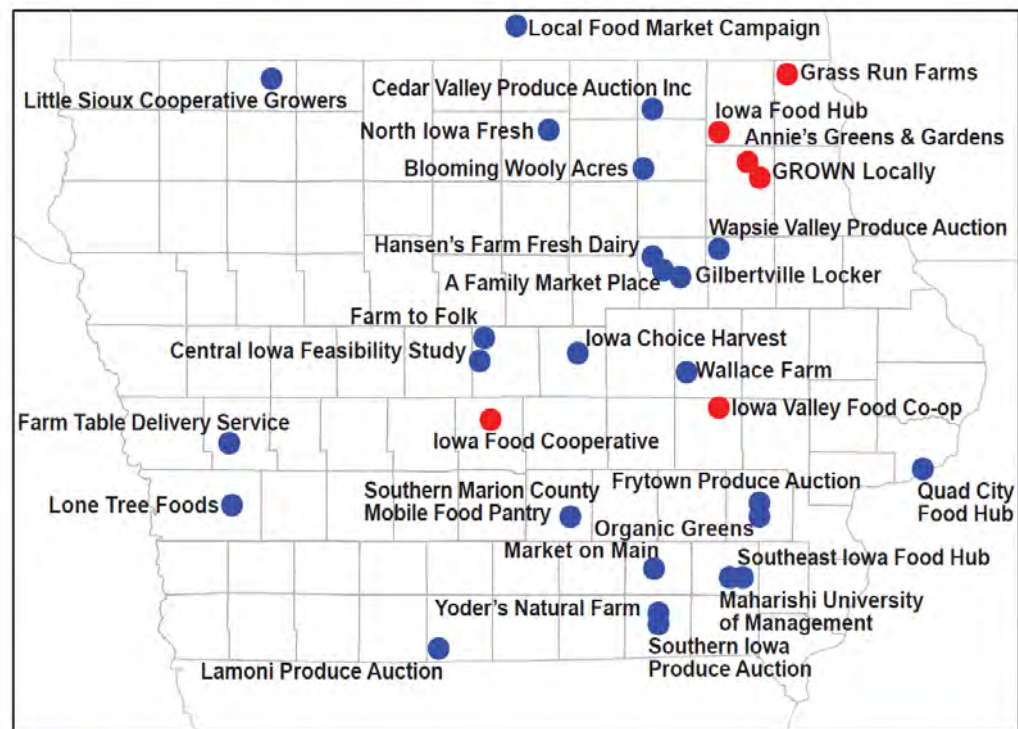
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Activities of current food hubs in Iowa

31 sites of “food hubs or food hub related activity” identified in Leopold Center report



From “Food Hub Development in Iowa” Report by Arlene Enderton and Corry Bregendahl, Leopold Center for Sustainable Agriculture, 2015.

Activities of current food hubs in Iowa

Scope in 2013...

- \$4.5 million total gross revenue
- Employed a total of 58 people
- Sold products from 459 farmers
- 62% were reported to be profitable

Based on survey responses from 13 food hub managers and 11 key informants

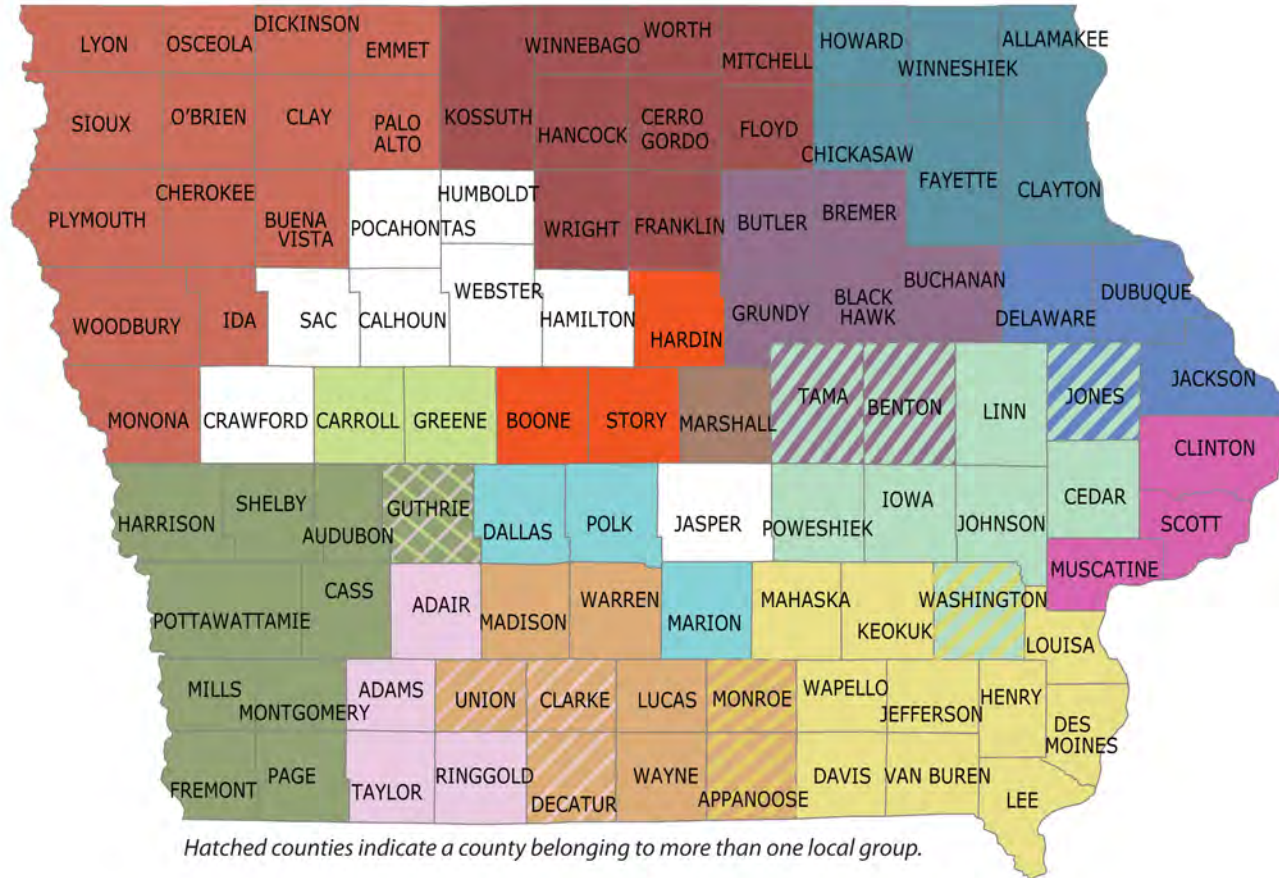


From “Food Hub Development in Iowa” Report by Arlene Enderton and Corry Bregendahl, Leopold Center for Sustainable Agriculture, 2015.

ISU EXTENSION & OUTREACH - APPROACHES

- **FUNDING** for innovative food hub projects
- **EDUCATION & OUTREACH** for food hubs and producers
- **COLLABORATIVE RESEARCH** on financial management, production planning, business models, pilot projects
- **LEARNING COMMUNITIES** like the Regional Food Systems Working Group and Food Hub Managers Working Group

LEARNING COMMUNITIES: Regional Food Syst. Working Group



FUNDING: Marketing & Food Systems Initiative

Part of the Leopold Center for Sustainable Agriculture's grant-making program (first funded through the Iowa legislature in 1987 with a tax on fertilizer nitrogen)

8-10 multi-year projects at a time

\$50,000-\$70,000 per grant, total of \$250,000-300,000 per year

"Food hubs / food business distribution development" were explicit focus areas on the RFPs in 2014-2016

FUNDING: Marketing & Food Systems Initiative

Some project titles of grants awarded for food hub work...

Feasibility studies and business planning

- “Building a direct-to-consumer distribution system in Iowa” (2007)
- “Research and development of an online localfoods buying club cooperative” (2011)
- “Establishing shared-use processing facilities at three possible locations in central and south central Iowa” (2012)

Market Development

- “Increasing the capacity of a local food hub to service the public school market” (2014)
- “Increasing local food consumption in rural communities by partnering with non-traditional food retailers” (2015)

FUNDING: Marketing & Food Systems Initiative

New nodes for existing food hubs

- “Market development and logistics for local food distribution in the Cedar Valley” (2014)
- “Investigating feasibility of food hub node expansion in Dubuque, Iowa” (2016)

Operations & logistics

- “Supply chain management for Iowa regional food systems” (2015)
- “Workflow optimization for Iowa regional food hubs” (2016)

EDUCATION & OUTREACH: for hubs & farmers

- Food safety training and systems, e.g. Group GAP
- Technical assistance for farmers interested in working with a food hub (marketing, regulations, etc.)
- Outreach to buyers and schools on benefits of local foods
 - Cycle menus with schools, retail pilots with grocery stores, worksite food box program....
- Assistance with Board leadership and policy development
- Sharing best practices and research findings

EDUCATION & OUTREACH: Iowa Food Hub



Photos courtesy of Iowa Food Hub



COLLABORATIVE RESEARCH: Lessons learned

IOWA *food hub* LOCAL FOOD SYSTEM TOOLKIT SERIES No.2

Managing Cash Flow for a Low-Capital Food Hub Start-up

Starting a food hub is a capital-intensive process. What should a manager do if adequate start-up money is not available?

It is often assumed that starting a food hub is a capital-intensive process requiring large investments in infrastructure, transportation, logistics and personnel at the outset. While grants or loans can provide start-up funds for a new food hub distributing fresh local produce, in many cases these resources are not available. Grants for a new business can be hard to find, and most financial institutions are not willing to lend to start-up operations, especially those that sell perishable food items. Fortunately, there's hope. For the Iowa Food Hub, experience has shown that food hubs can be

What is Cash Flow?

Cash flow is the movement of money into or out of a business. For a business owner, cash is the amount of money that the business has in its bank account and on hand – that is, how much money the business has available to spend at a given time, without incurring additional debt or selling something.

Selling goods or services creates positive cash flow (money moving into the business), but not until the business actually receives money from the customer. Likewise, if the business incurs an expense, it will only experience negative cash flow when it pays the bill for the expense. Thus, the flow of cash and the flow of

COLLABORATIVE RESEARCH: Lessons learned

Examples of reports on best practices & lessons learned:

- “Starting a worksite food box program”
- “Managing cash flow for a low-capital food hub startup”
- “Using accounting software for food hubs: processing traceable orders”
- “Production Planning for Aggregators”

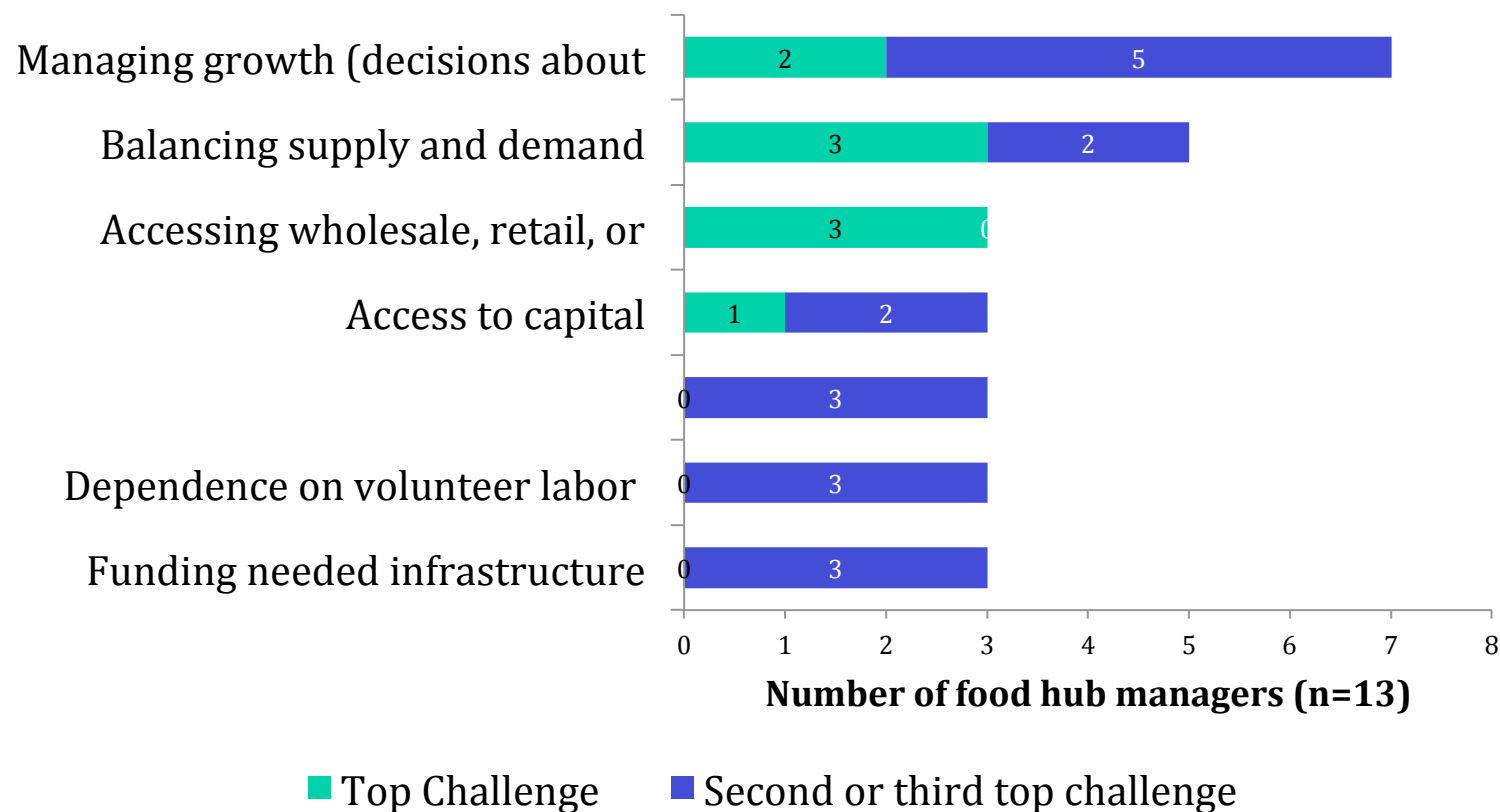
See store.extension.iastate.edu
and leopold.iastate.edu/pubs
and iowafoodandfitness.org

LEARNING COMMUNITIES: Food Hub Managers Working Group



LEARNING COMMUNITIES: Food Hub Managers Working Group

Challenges identified by food hub managers



From “Food Hub Development in Iowa” Report by Arlene Enderton and Corry Bregendahl, Leopold Center for Sustainable Agriculture, 2015.



Quarterly meetings...

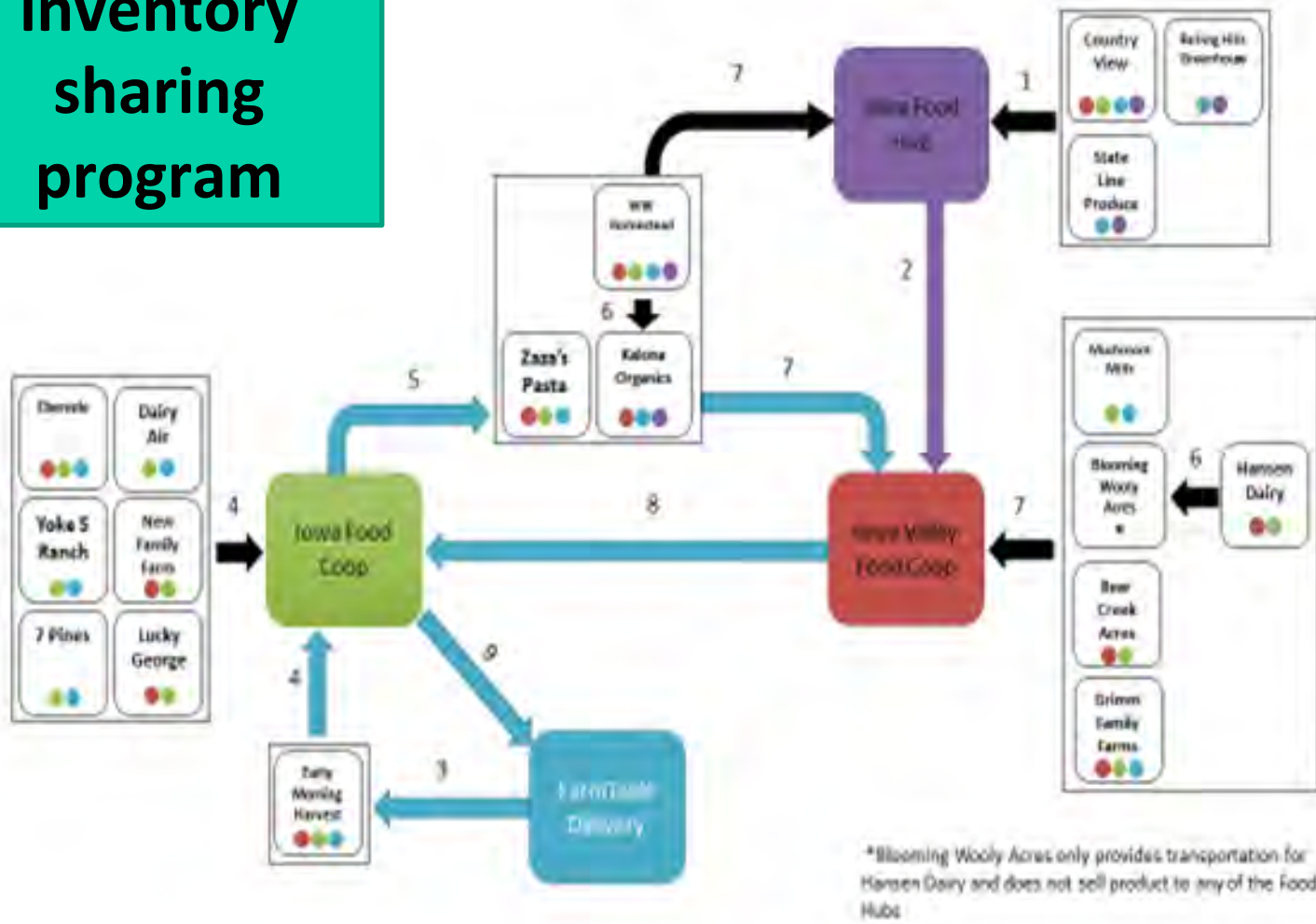


LEARNING COMMUNITIES: Food Hub Managers Working Group

Meeting Topics to Date

- Facility tours and in-depth presentations from four food hubs
- Overviews of all hubs and shared challenges
- Pricing and sales strategies (presenter: Red Tomato)
- Cross-hauling collaborations between food hubs
- Distribution route inventory (presenter: Krecji lab)
- Planning for Growth: key issues
- Food hub breakeven: how it's calculated, what we know
- Report on National Food Hub conference, FSMA, Group GAP, PACA
- *Coming soon:* Calculating Key Metrics: example from an Iowa hub

NCSARE grant for multi-hub inventory sharing program



LEARNING COMMUNITIES: Food Hub Managers Working Group

Leveraging professional development opportunities...

- National Food Hub Conference scholarships
- Coming Soon: Iowa-based short course
- Possible future: Shared training for producers in branding, marketing, packaging



LEARNING COMMUNITIES: Food Hub Managers Working Group

Benefits as described by food hub managers

“There is no better way to understand the other food hubs than to see their locations.”

“Clearer ideas about cross-hub collaboration opportunities, plus development of specific plans to facilitate collaboration, including securing grant \$ to implement these plans.”

“The process of bringing together individuals/organizations that may not have initially seen any need to work together and to foster trust between them is one of the greatest benefits from these ongoing meetings.”

Supply Chain Management for Regional Food Hubs

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Overall Research Objective

Develop quantitative & data-driven supply chain management tools to improve regional food distribution efficiency & effectiveness

- Select appropriate logistics **performance metrics** for producers and food hubs
- Implement methods to **collect data** to assess these metrics
- Design & implement tools and methods to **improve processes**

Current Projects with Iowa Food Hubs

- 1) Developing producer quality assurance program
- 2) Matching supply & demand
- 3) Tracking & reducing transportation costs
- 4) Measuring & standardizing workflows within food hub distribution centers
- 5) Developing systems for inventory tracking & logistics coordination among food hubs

1. Quality Assurance

- Design & implement a “Balanced Scorecard” to enable food hub manager to assess & communicate producer performance over time
- Attributes & weights: example from an Iowa food hub:
 - Quality – 40%
 - Packaging– 20%
 - Delivery – 20%
 - Responsiveness – 10%
 - Cost – 10%



2. Matching Supply & Demand

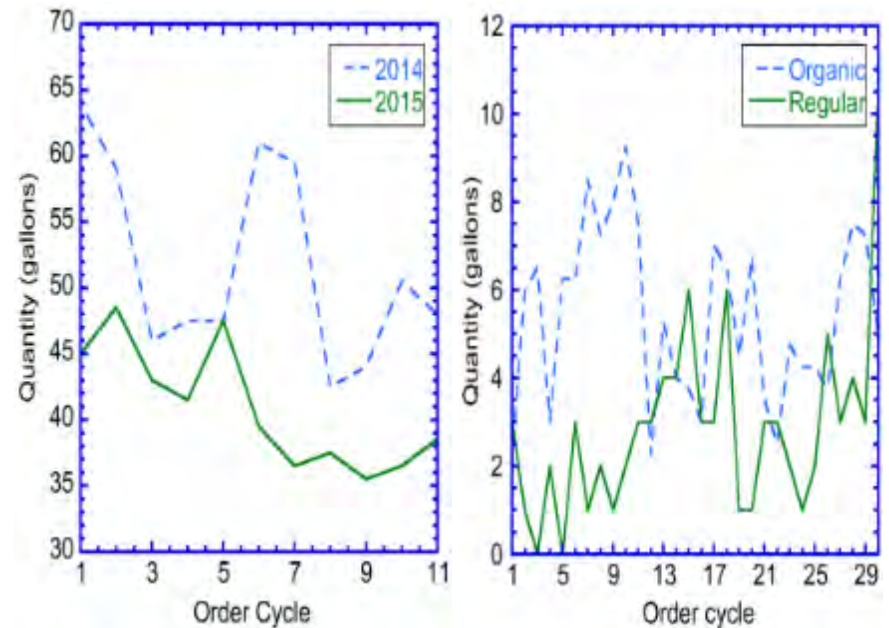
- Use food hub's historical sales data to identify & understand trends
- Analysis provides decision support for food hub manager

Some results on eggs sales



Average **219** dozens of eggs were sold in an order cycle with an average of **7** unique producers selling in each cycle

Conventional vs. organic milk



3. Transportation Costs

- Use data & modeling to support food hub transportation decisions, including:
 - How much to charge per mile for pickups & deliveries
 - Whether or not to accommodate certain pickup/delivery locations (is it worthwhile?)
 - What data is needed to support these decisions, and how to collect it

4. Workflow Measurement & Standardization

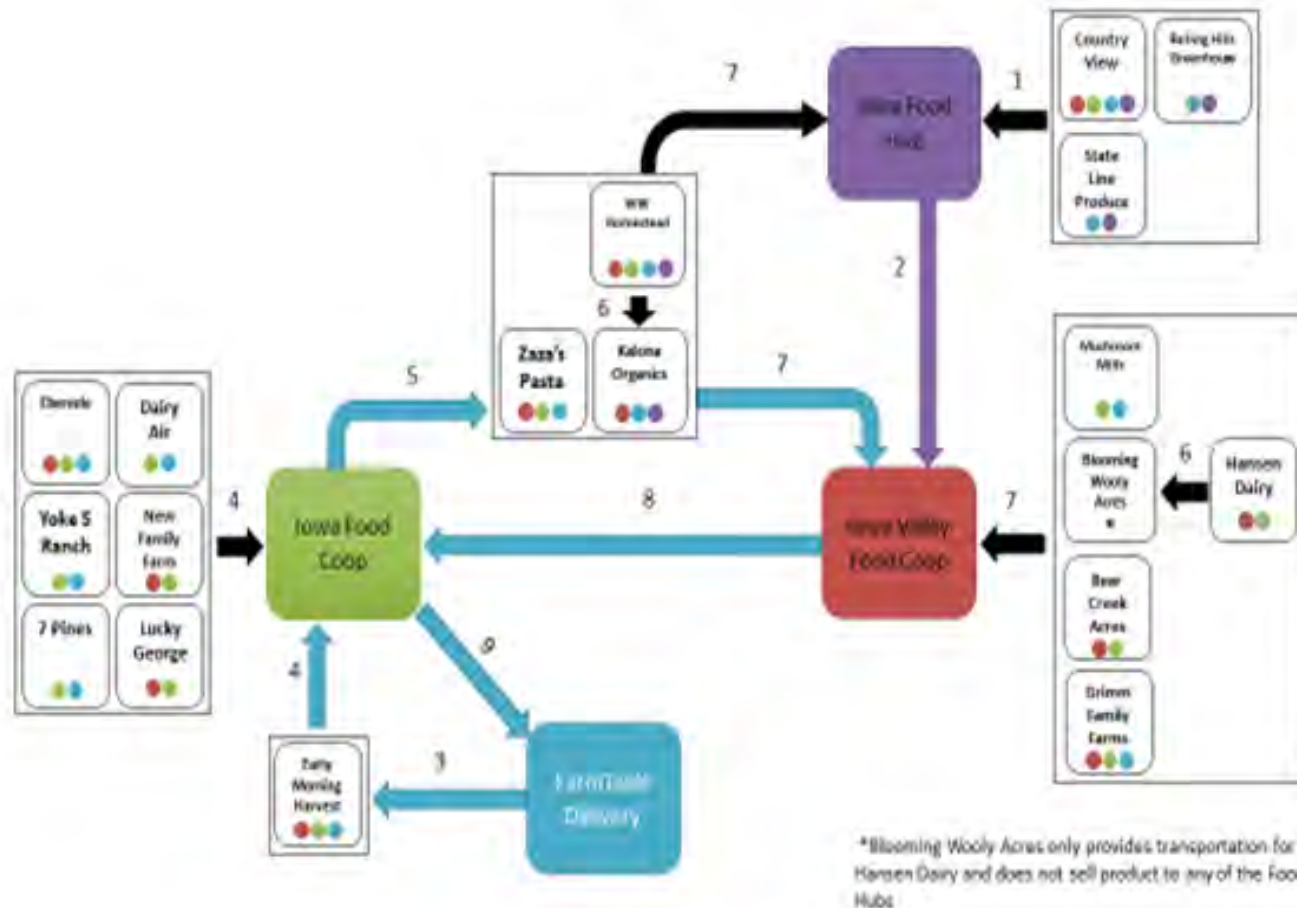
- Observe & perform time studies of food hub employees, with a focus on improving
 - Efficiency
 - Accuracy
 - Safety
- Determine appropriate labor requirements for specific tasks & workloads
- Develop standardized work methods & training manuals

5. Inventory Tracking & Logistics Coordination

- Develop an inventory tracking system to support an existing transportation & warehousing coordination among four Iowa food hubs
- Shared IT system:
 - Labels
 - Scanning
 - Inventory management system
- Will require significant producer participation



Iowa Food Hub Logistics Coordination



Lessons Learned - Extension

- Provide competitive funding to support innovation
If funding for research collaboration is available, try to issue an RFP – make the process transparent and fair
- Support learning communities of practitioners
Step back and listen
- Communicate with the public about roles and intentions
Keep farmer groups in the loop
- Focus on opportunities for farmer
Clearly communicate how they benefit
- Don't get so focused on profitability that you forget the mission
Make sure your spokespeople articulate the mission-driven nature of food hub work

Lessons Learned – Supply Chain Research

- Give collaborator stipends when doing research or testing out new tools
- Develop formal TA agreements with mutual expectations
- Implementation of a new system can be difficult & time consuming; researcher must be up front with hubs about this & hubs must commit to follow through
- Identify & incorporate all key stakeholders who will be implementing a new system into the process
- Set boundaries around the scope of work, especially for students

Thank you!

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