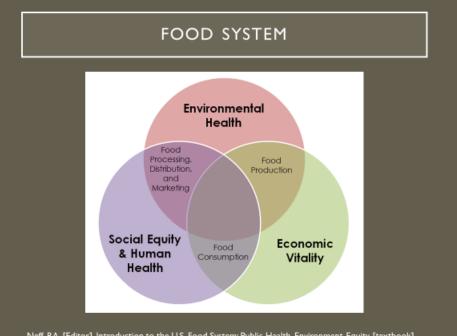
# The Role of Local Foods & Food System Developments in US Communities

### DAWN THILMANY COLORADO STATE UNIVERSITY

### PRESENTATION TO STATE AGRICULTURE AND RURAL LEADERS & COUNCIL OF STATE GOVERNMENTS

JANUARY 2018

National Interest in Local FoodsUSDA's (2015) Four Pillarsof Agriculture and RuralEconomic Development:1. Productio



Neff, RA. [Editor]. Introduction to the U.S. Food System: Public Health, Environment, Equity. [textbook] Wiley-Jossey Bass, 2014. 1. Production Agriculture

2. Local and Regional Food Systems

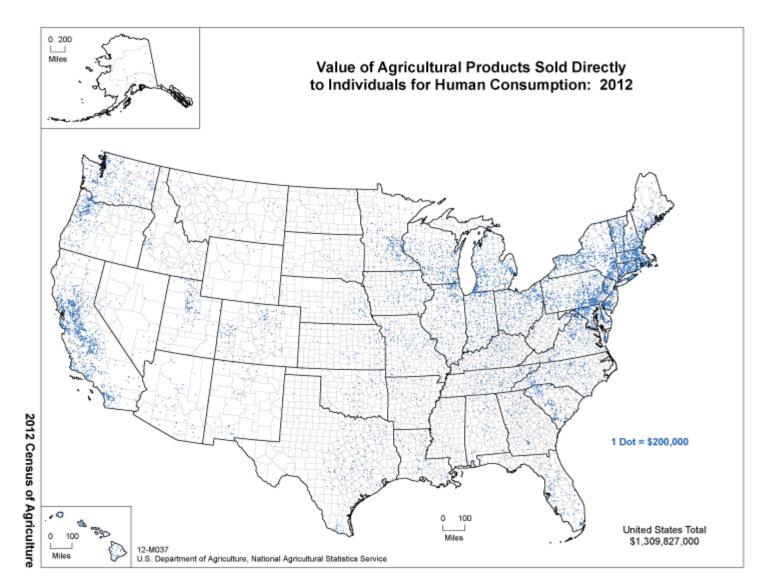
3. The Biobased Economy

4. Conservation and Natural Resources

LocalFoodEconomics.com

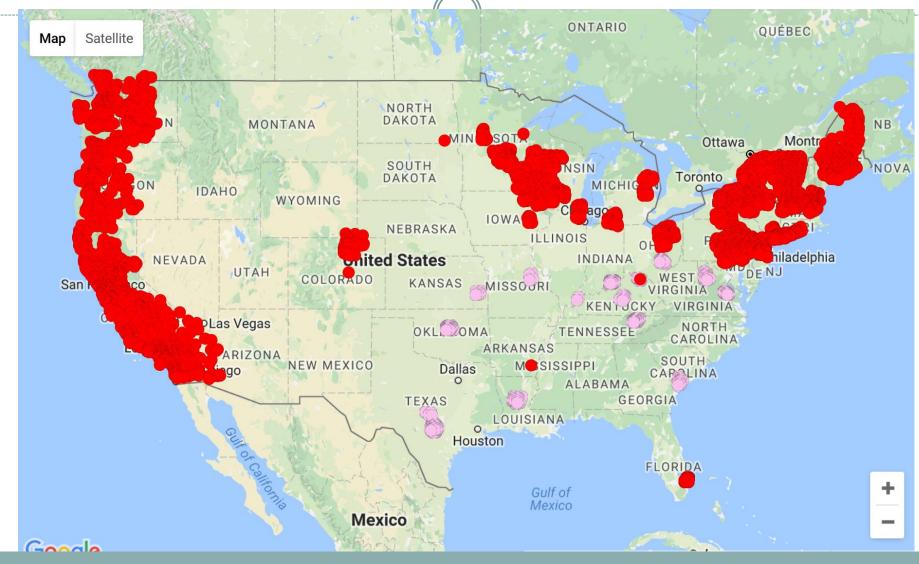
## Is Local Just Really a New Focus on Place?

- Differential Market Evolution across US Regions and the Rural-Urban Continuum
- Evidence of Differential Market Opportunities across Places
- Why would we Expect Economic Benefits or Impacts to Rural Areas or Communities?

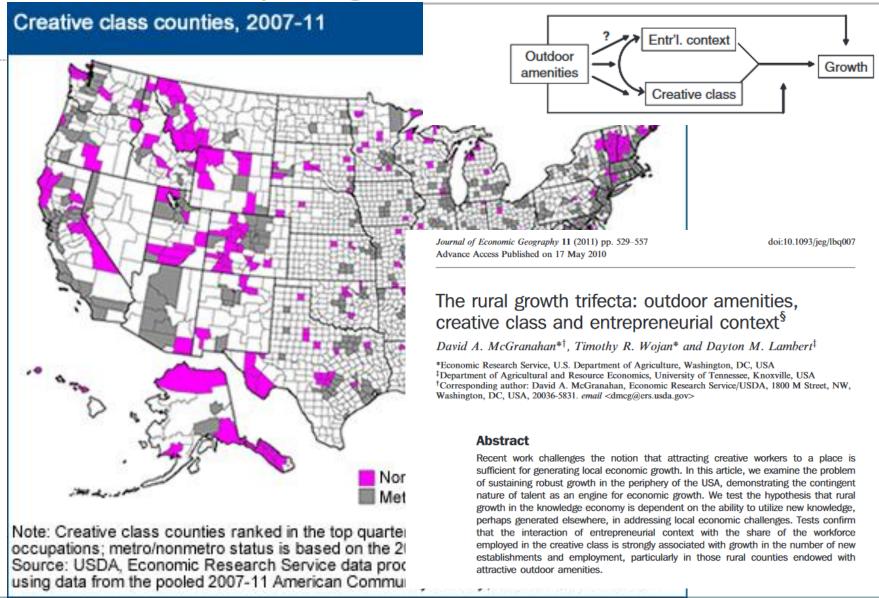


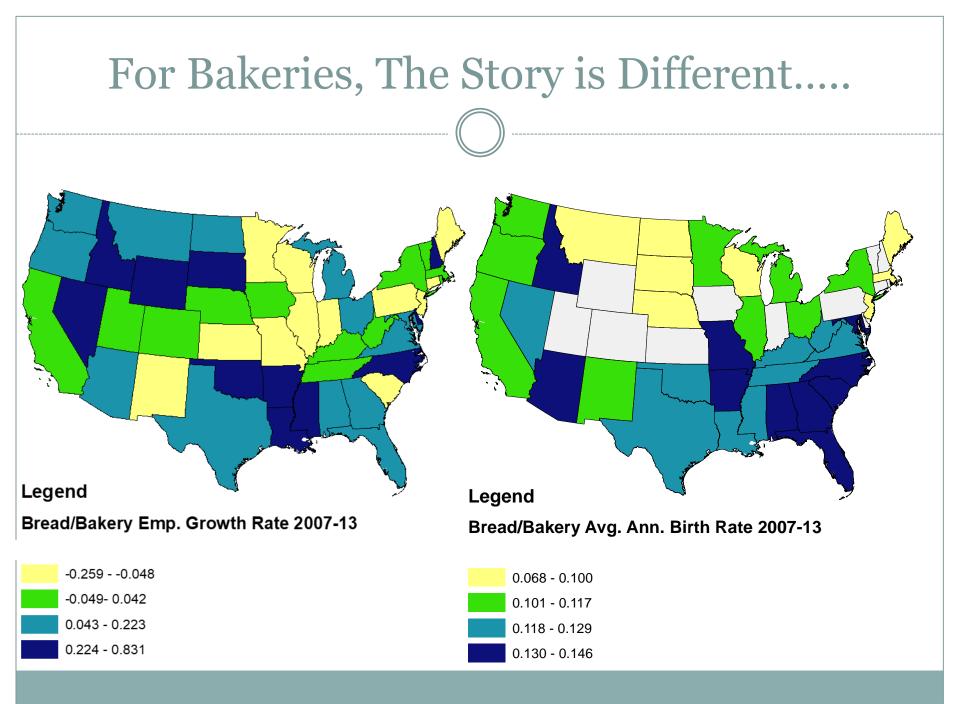
https://www.ers.usda.gov/publications/pub-details/?pubid=42807

## **Organic Hot Spots**



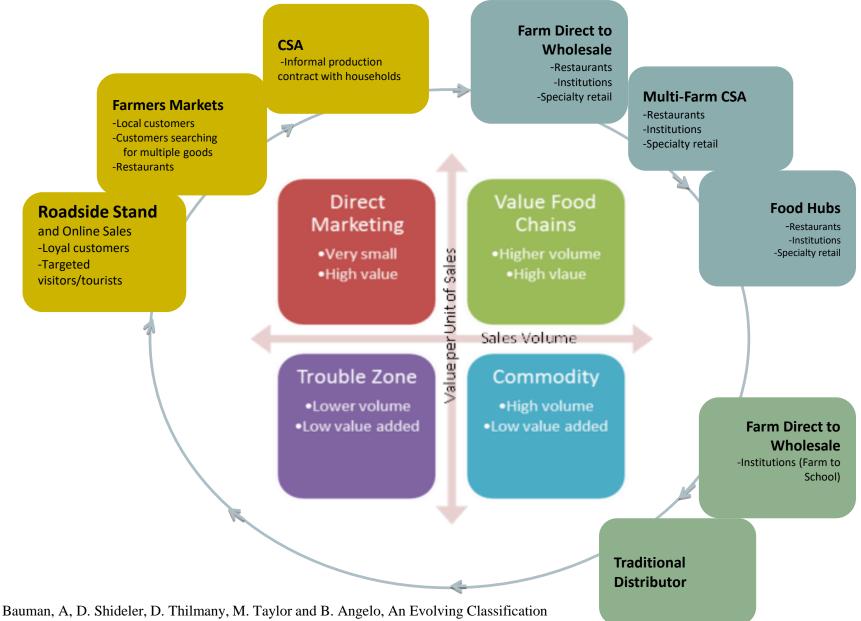
## Why Regional Differences?





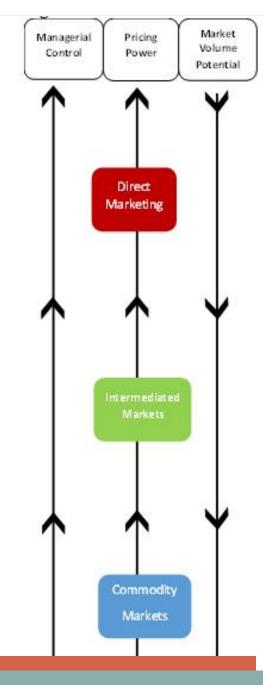
# Exploring Economic Patterns in Food Systems

### WHAT DO DIFFERENT MODELS OF AG AND FOOD PRODUCTION MEAN FOR THE ECONOMIES OF YOUR STATES?



Scheme of Local Food Business Models. eXtension CLRFS Resource page. May 2014 online:

http://www.extension.org/pages/70544/an-evolving-classification-scheme-of-local-food-business-models#.VVZOBkbG-ix





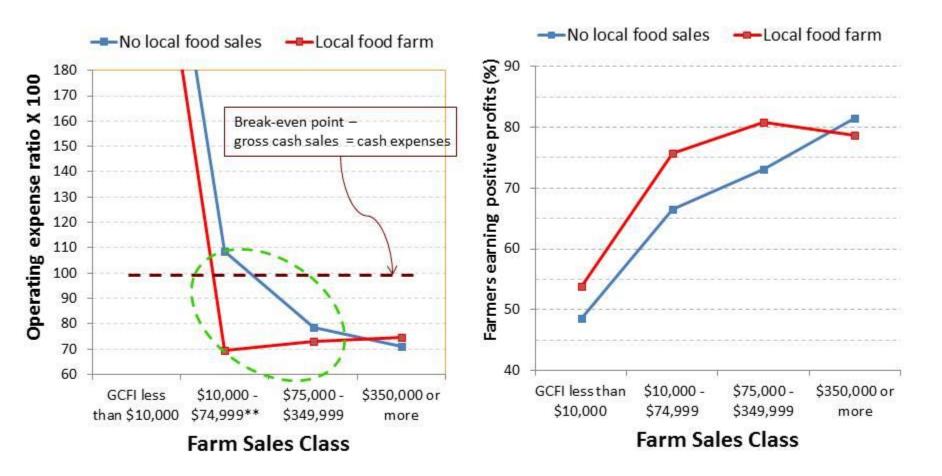




There is a likely tradeoff between volume of sales and two key management factors: 1) Managerial control retained by producers 2) Pricing power of producers

Is there an "optimal" place on continuum for an operation?

## Local Foods and Small Farms



Difference in estimates: \*\* p-value < 0.05.

GCFI = gross cash farm income. Source: USDA, ERS/NASS, ARMS, 2008-2011.

# Profitability by Scale

### Table 3: Return on assets, by gross cash farm income and quartiles

	y1Kt	y1Kto75k		y75Kto350K		y350kto1M		y1Mtohigh		ales
	Mean	St Error	Mean	St Error	Mean	St Error	Mean	St Error	Mean	St Error
Quartile 1	-208.803	99.632	-19.363	2.750	-16.195	3.263	-8.295	1.809	-123.244	53.053
Quartile 2	-10.477	0.242	-3.149	0.244	-0.732	0.278	5.928	0.529	-6.762	0.145
Quartile 3	-3.936	0 113	1.082	0.189	5.675	0.540	<del>16.982</del>	0.675	-1.186	0.076
Quartile 4	4.571	3.419	30.394	8.139	41.670	7.479	67.776	7.136	23.527	2.921

Note: Return on asset was multiplied by 100 for interpretation and was found to be significantly

different across all quartiles for all sales classes.

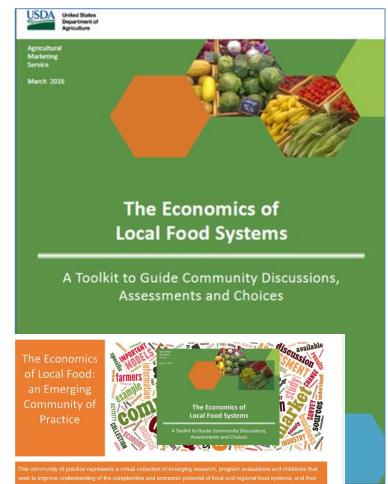
# Profitability by Urban-Rural

	Metro (573)	Metro Adjacent (289)	Rural (150)	All Regions
	Mean	Mean	Mean	Mean
Quartile 1	-196.000	-40.000	-42.000	-123.244
Quartile 2	-6.600	-7.200	-6.400	-6.762
Quartile 3	-1.200	-1.200	-1.000	-1.186
Quartile 4	27.700	21.100	12.300	23.527

All quartiles significantly different, except 1 & 2 in Metro All highest performing producers (Quartile 4) different across urban-rural continuum

## A New Resource for Communities to Assess Economic Outcomes

- In 2014, the U.S.D.A. Agricultural Marketing Service convened a team to develop a best practice Toolkit for evaluating the economic impacts of local food system activities.
- The Toolkit is made up of seven modules that can be grouped into two stages of food system planning, assessment and evaluation.
  - The first set of modules (1-4) guides the first stages of an economic impact assessment and includes framing the system, relevant economic activities and assessment process as well as collecting and analyzing relevant primary and secondary data.
  - The second set of modules (5-7) provides a more technical set of practices and discussion of how to use the information collected in stage one to conduct a more rigorous economic impact analysis.



### https://localfoodeconomics.com/toolkit/

## Website Features-Modules, Webinars, **Powerpoints, Case Studies and Data Sources**

### **Case Studies**

#### Modules

Videos and Webinars

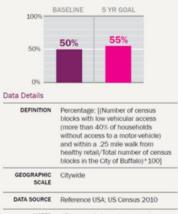
#### IMPLAN Videos 🗖

**Evaluating the Economic Impacts** of Local and Regional Food Systems: Best Practices

#### Strengthening Buffalo's Food System

#### How Buffalo Is Doing

Average percentage of households with low vehicular access per block group within five minute (.25 mile) walk of a healthy food retail destination



Description

If your food system assessment

team wishes to map watershed

boundaries, soil conditions, or

other natural resource features

evaluation, this is the essential

source of data. Healthy soil and

clean water certainly affect the

economic possibilities for food

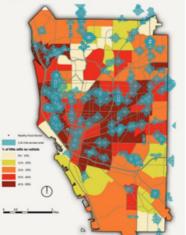
producers, so this can be quite

relevant to your economic

planning and evaluation.

as part of planning or

Location of healthy food retail in relationship to block groups with low vehicular access



#### UPCOMING EVENTS



#### Webinar: Measuring Outcomes

May 25 @ 1:00 pm - 3:00 j

Conservation Service

Agriculture

Geospatial Data Gateway (GDG)

U.S. Department of

Natural Resources

Web address: http://datagateway.nrcs.usd a.gov/

**Dataset Source** 

#### **Appendix 1: Specialized Secondary Datasets**

environmental and natural resources data. Comprehensiveness: Exceptionally detailed mapping data covering most of the U.S. at a localized scale. A separate area of the NRCS website offers technical assistance tools for conservation programs. Levels: Local to national levels. Accuracy: Very accurate. Based on thorough scanning of aerial maps, field data, etc. Ease of use: Relatively easy to access, with a broad array of data sources available. However, professional assistance for interpreting data and mapping is often advised to understand the precision and limitations of the data.

Characteristics

Unique Feature: One-stop source for

Limitations This data set does not • speak directly to economic conditions on farms, but rather covers the environmental and natural resource contexts in which farmers operate.

The finest resolution of this farm data is an area of 30 meters by 30 meters (roughly 10,000 square feet) so very small fields or smallfarm regions may not be well represented.

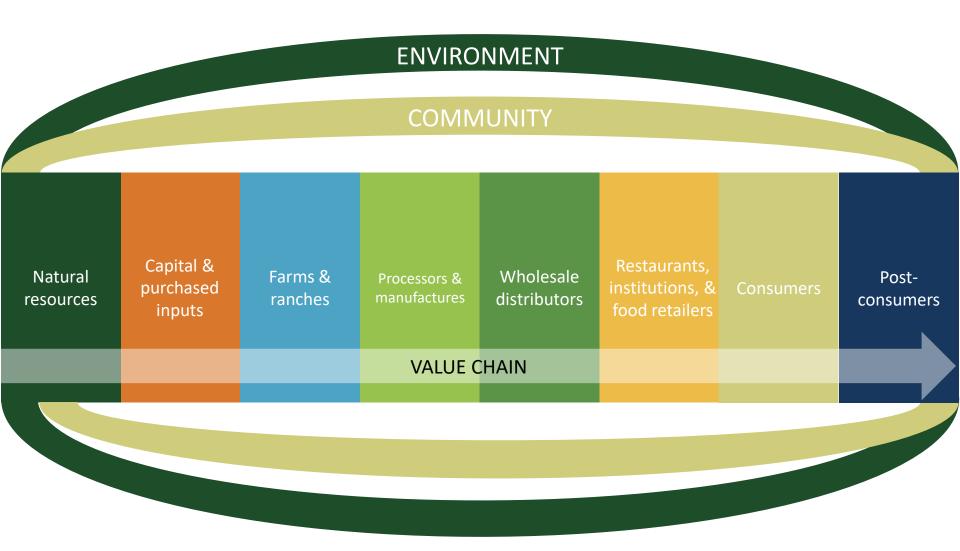


# Colorado Blueprint of Food and Agriculture

AGRICULTURAL SCIENCES



The Blueprint documents key assets, emerging issues, and shared priorities for future investments in food and agriculture around the state



http://foodsystems.colostate.edu/research/colorado-blueprint/

## **Colorado Blueprint of Food and Agriculture**

AGRICULTURAL SCIENCES

Public Attitudes about Agriculture in Colorado

Regional and Industry Town Halls The Value Chain of Colorado Agriculture

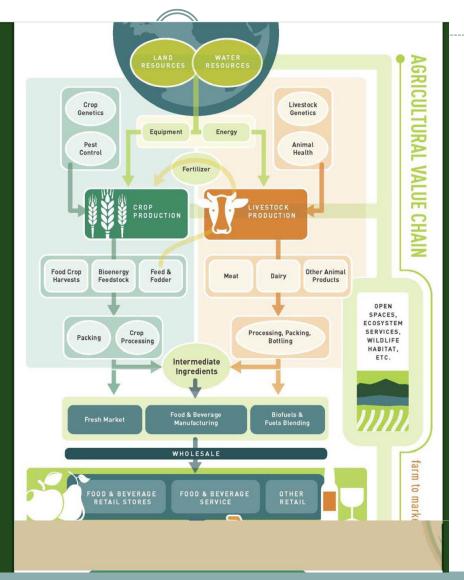
# Identify and inform eight major

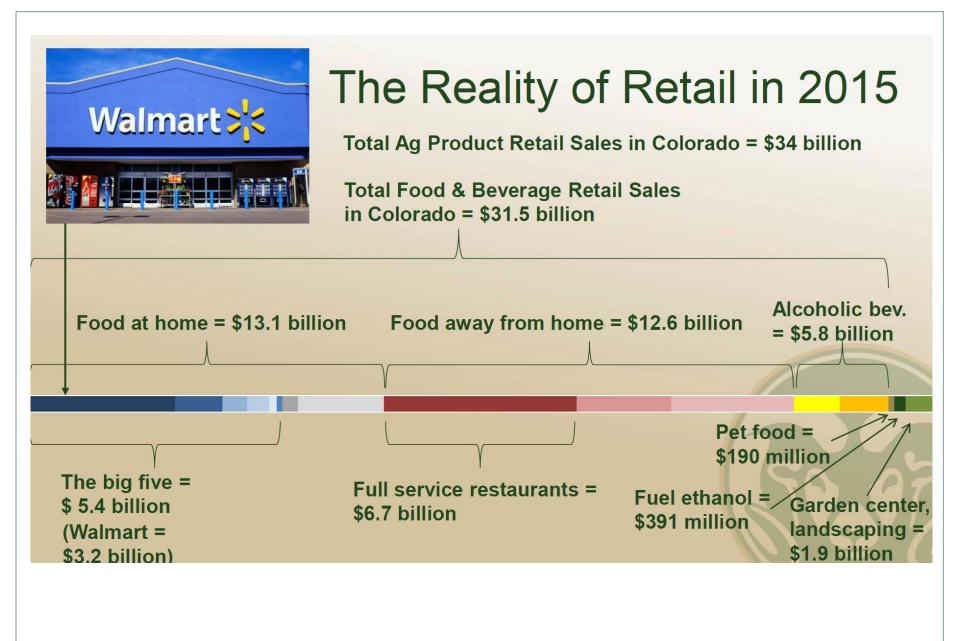
### **Cross-Cutting Opportunities**

- 1. Create and retain agricultural and food firms.
- 2. Develop **workforce and youth** to support the food and agricultural sectors.
- 3. Promote **the CO brand** and ensure it reflects the unique qualities of the state's agricultural, food, and beverage sectors.
- 4. Support a business- and consumer-friendly regulatory environment.
- 5. Address how **scale** impacts market performance, access, and opportunities.
- 6. Innovate and support **new technologies** for food and agricultural businesses.
- 7. Improve access to capital and resources for agriculture and food firms.
- 8. Integrate agriculture and vibrant communities.

## Colorado's Agricultural Value Chain

*More than* 200 distinct economic activities, subsectors, or specific industry classes (NAICS)





Do (or how can) food system contribute to rural wealth creation?



## Pilot Project: Denver Food Vision







- 3 pilot project/supply chains/regions
- Exploring how the 'winnable goals' might impact rural wealth creation
- Interdisciplinary team including 17 faculty members from 6 Colleges

## What Next for Policy and Analysis in this Area?

• For Local Foods (Place Based Food Innovation)....

....Further explore the survival, viability, economic benefits and spillovers of farm and food supply chain innovations

....What are the Employment Dynamics that may align with, be catalyzed from or result from new models of food production and marketing

• For Rural Development....

....can we better measure how local farms and food businesses change or improve indicators of rural development? What indicators matter for your state and communities?

• For State Policy and Programming....

....Assess the Assets, Opportunities and Market Dynamics of your area....Local Means Different Strategies work in Different Places

# Thanks!!

## Questions and Discussion