Food Systems Linkages to Rural Economic Development

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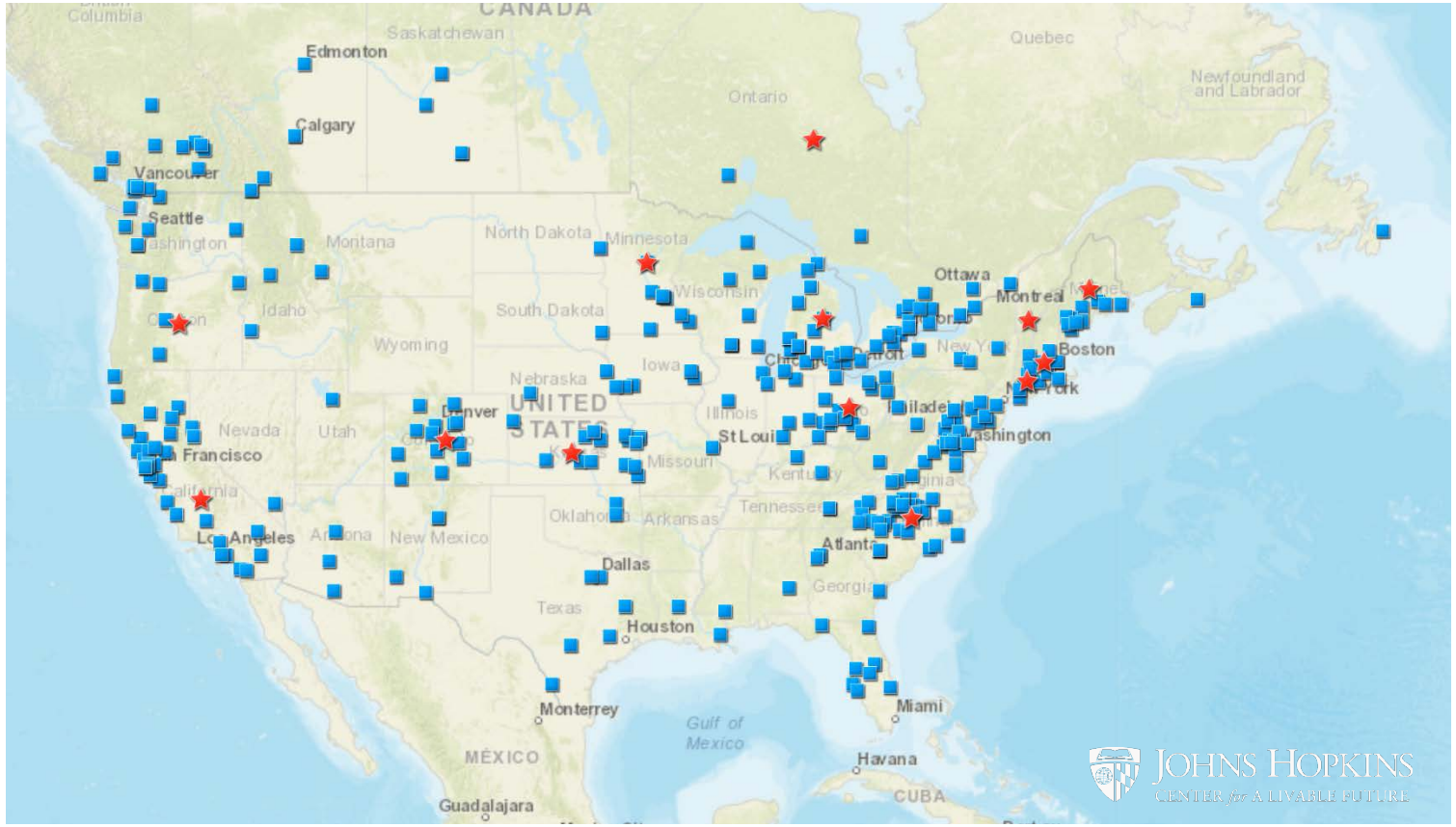
Innovations in the Food System: Shaping the Future of Food
Food Forum Workshop | National Academies of Sciences, Engineering, and Medicine
August 7, 2019

Opportunity: Leveraging Municipal Procurement

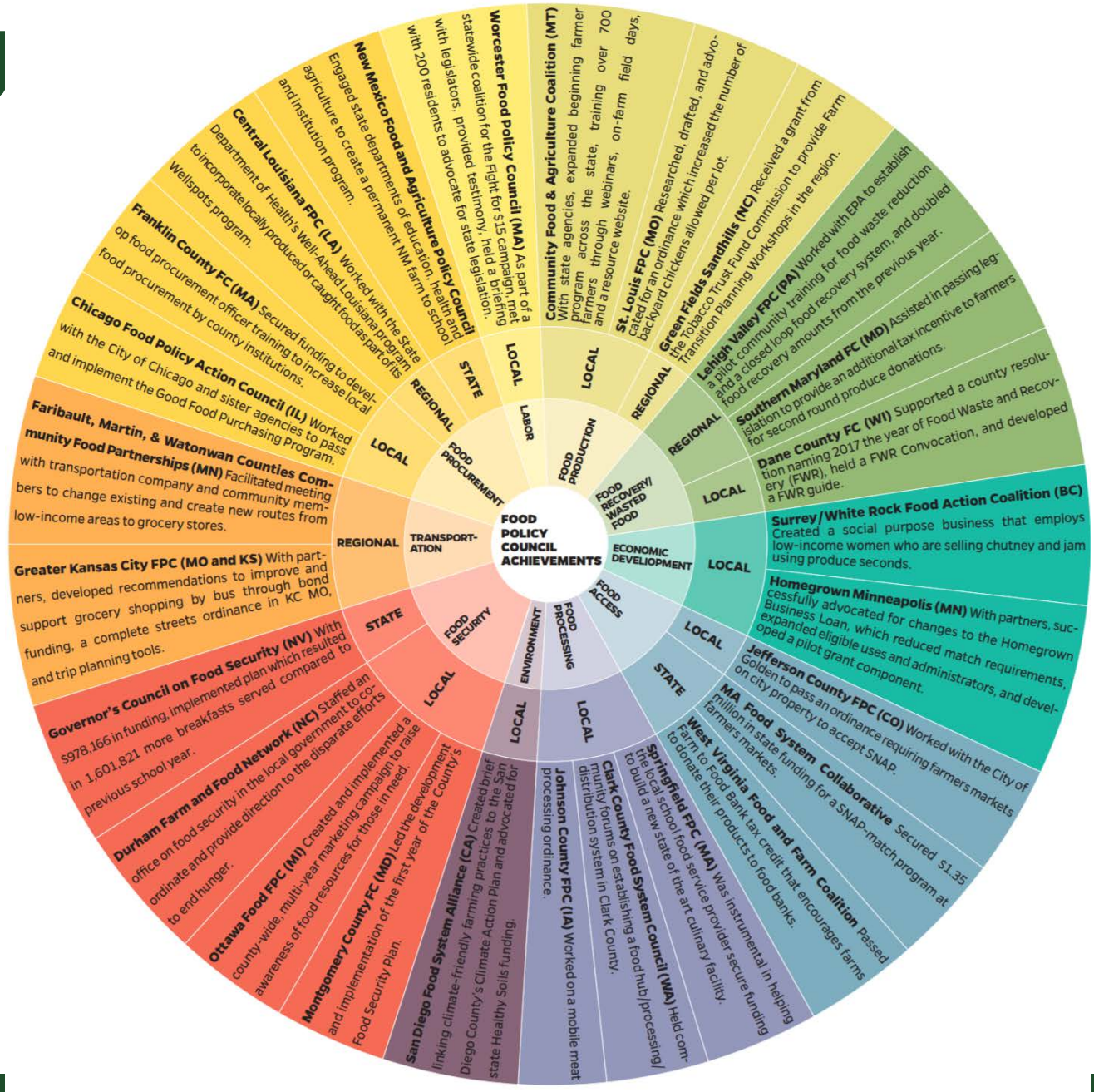
Food Policy Networks Map, North America



Source: Johns Hopkins Center for a Livable Future, 2019

- In 2016, over 300 active Food Policy Councils (Sussman and Bassarab 2017)
- 52 Food Policy Councils published food plans between 2010 and 2017.

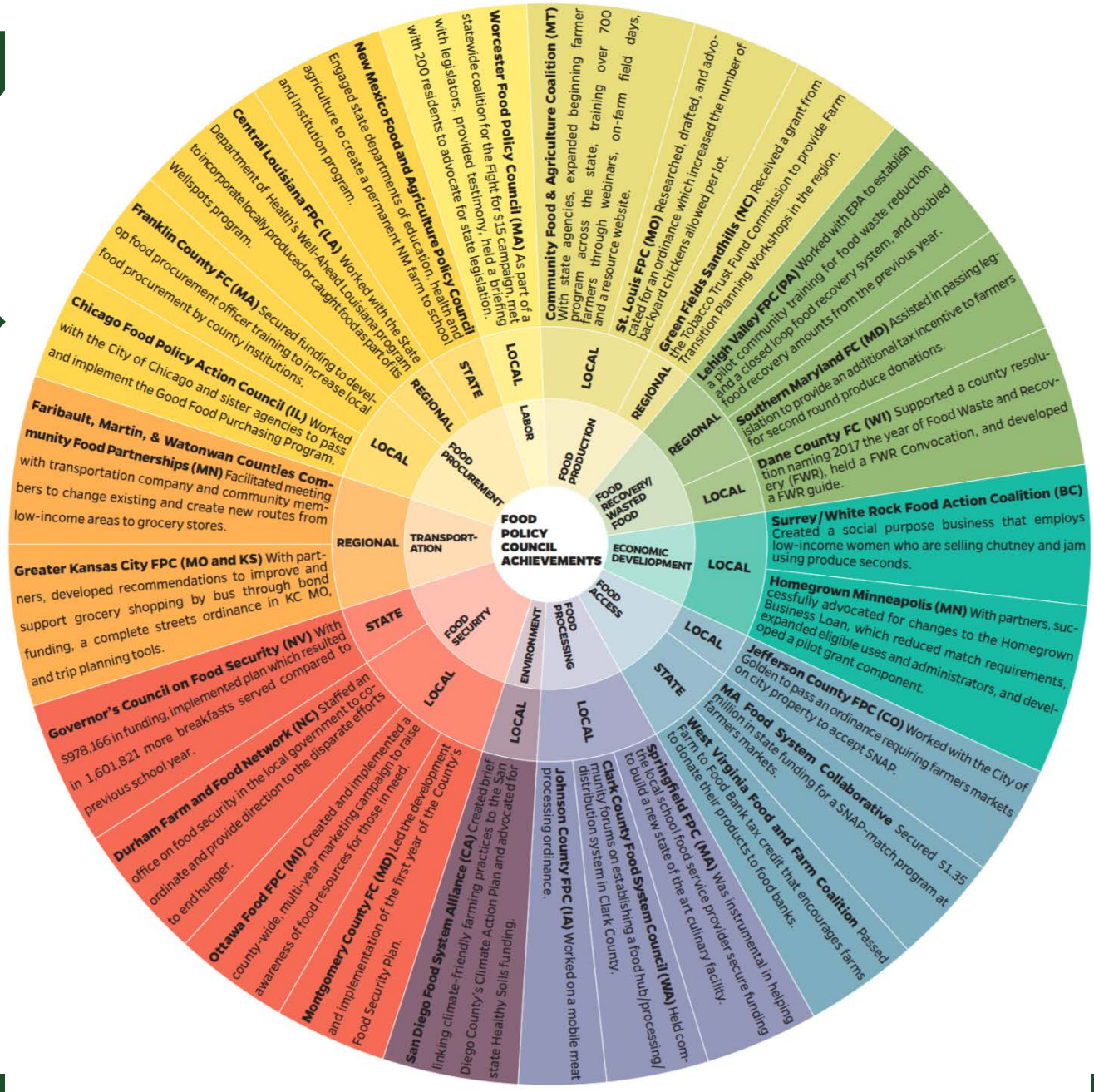
Opportunity: Leveraging Municipal Procurement



Source: Johns Hopkins Center for a Livable Future

Source: 2018 | www.foodpolicynetworks.org

Opportunity: Leveraging Municipal Procurement



Source: Johns Hopkins Center for a Livable Future

Source: 2018 | www.foodpolicynetworks.org

Opportunity: Leveraging Municipal Procurement

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Opportunity: Leveraging National School Lunch Program to Create Value Added Markets for U.S. Producers

- Over 100,000 schools across the U.S.
- 30.5 million students
- $12.99 billion in the National School Lunch Program

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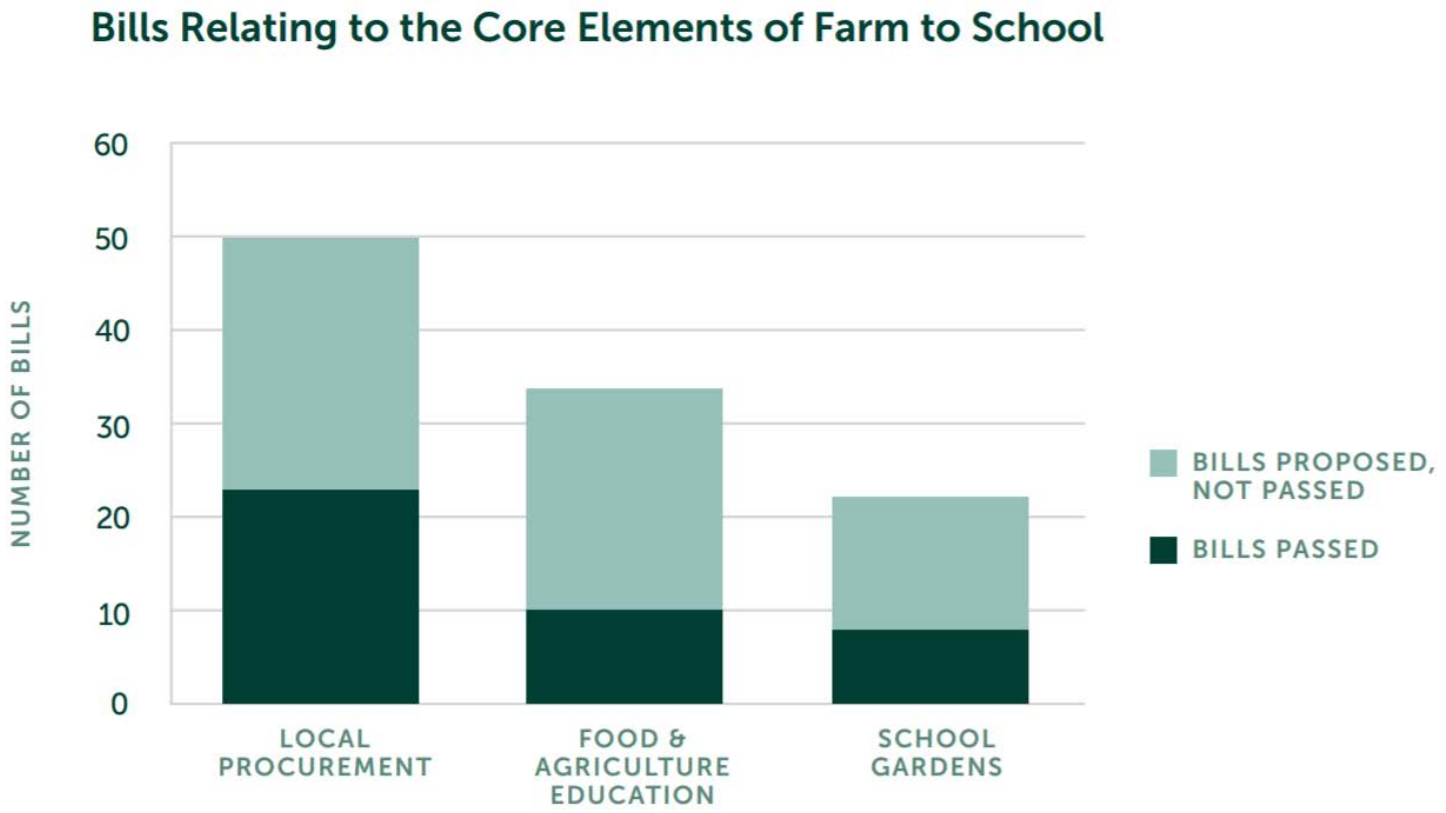
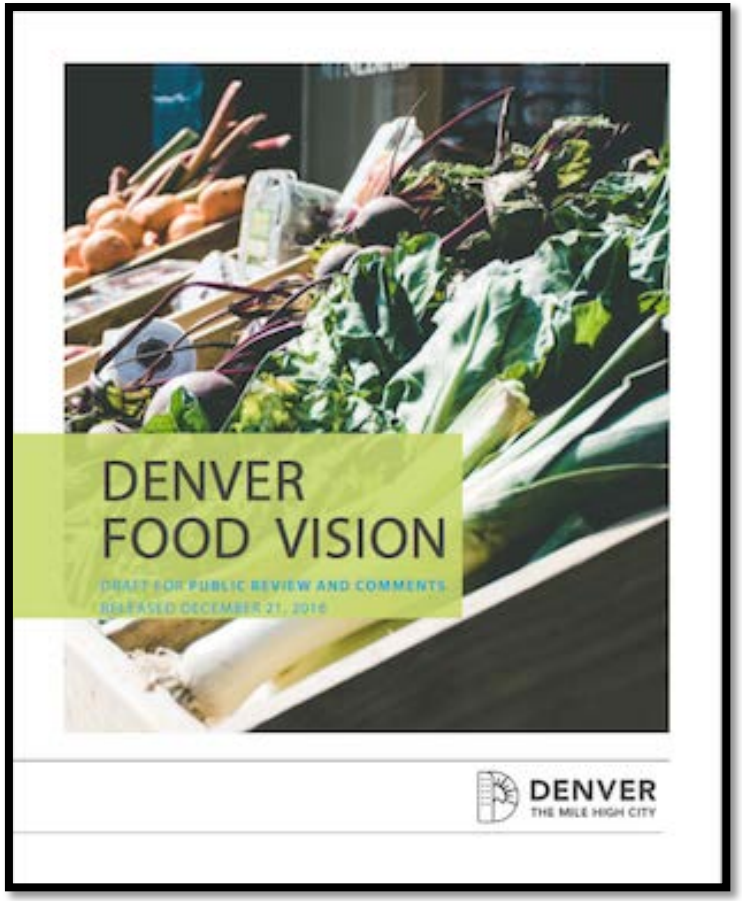


Source: National Farm to School Network 2019.

Opportunity: Denver's Food Procurement



2030 WINNABLE FOOD GOALS

- Increase size of the Denver food economy by $500M (from $6.9-7.4B per year)
- Attract $100M of new capital to Denver food businesses
- 25% of all food purchased by public institutions come from Colorado

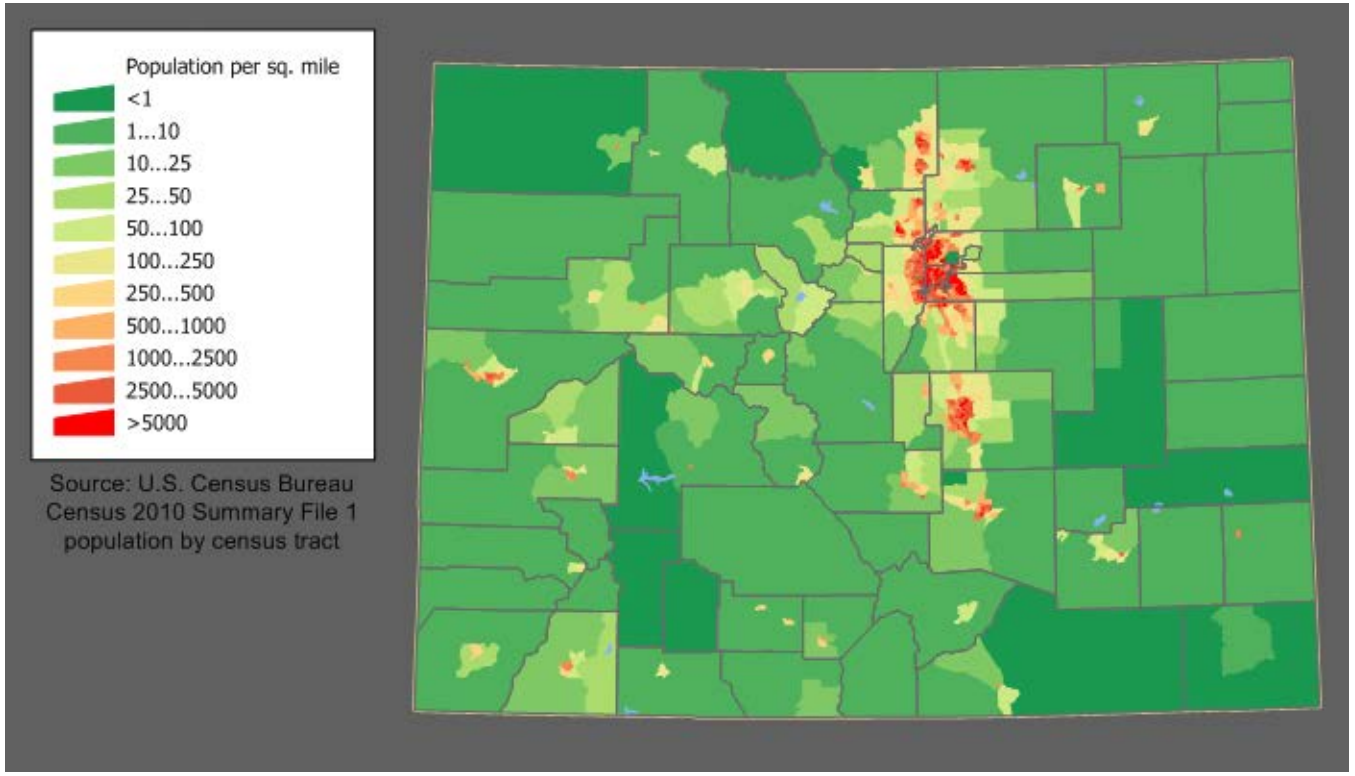
Opportunity: Denver's Food Procurement

	Total Spend	Local Spend
Denver County Jail	$ 3.5 M	$1.5 M
Boulder Valley School District	$ 3.5 M	
Denver Public Schools	$ 20.0 M	$4.0 M
Greeley-Evans Weld 6	$ 4.0 M	$0.8 M
University of Denver	$ 3.3 M	
Regis	$ 1.7 M	$ 200 k
Children's Hospital	$ 3.5 M	$ 100 k
Longmont United		
Centura (SAH, OrthoColorado)	$ 1.4 M	$ 70 k
	$ 40.9 M/year	**$ 6.7 M/year**

https://www.denvergov.org/foodplan

So…lots of purported opportunity, but does is there evidence that farmers, ranchers, and rural communities and economies benefit?

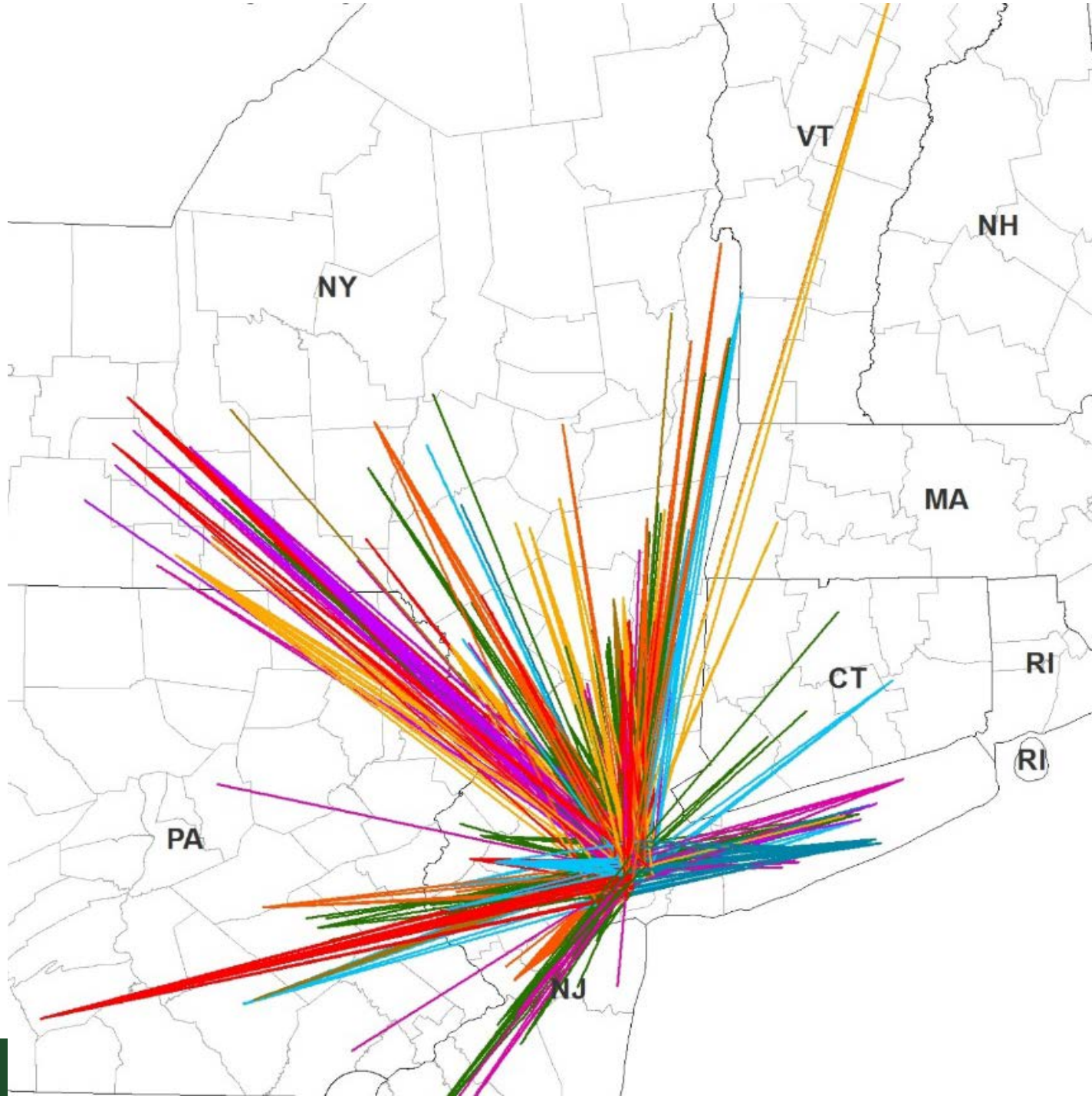
Food systems development strategies involve rural-urban linkages



According to the 2017 Census of Agriculture, Denver County has 12 farms.

- 3 were <$1,000 in sales
- 5 were between $1,000-$2,499
- 1 was between $10,000-$19,999
- 2 were between $50,000-$99,999

Food systems development strategies involve rural-urban linkages



Source: Schmit, T.M., B.B.R. Jablonski, J. Minner, D. Kay, and L. Christensen. 2017. Rural wealth creation of intellectual capital from urban local food system initiatives: developing indicators to assess change. *Journal of Community Development.* 48(5): 639-656.

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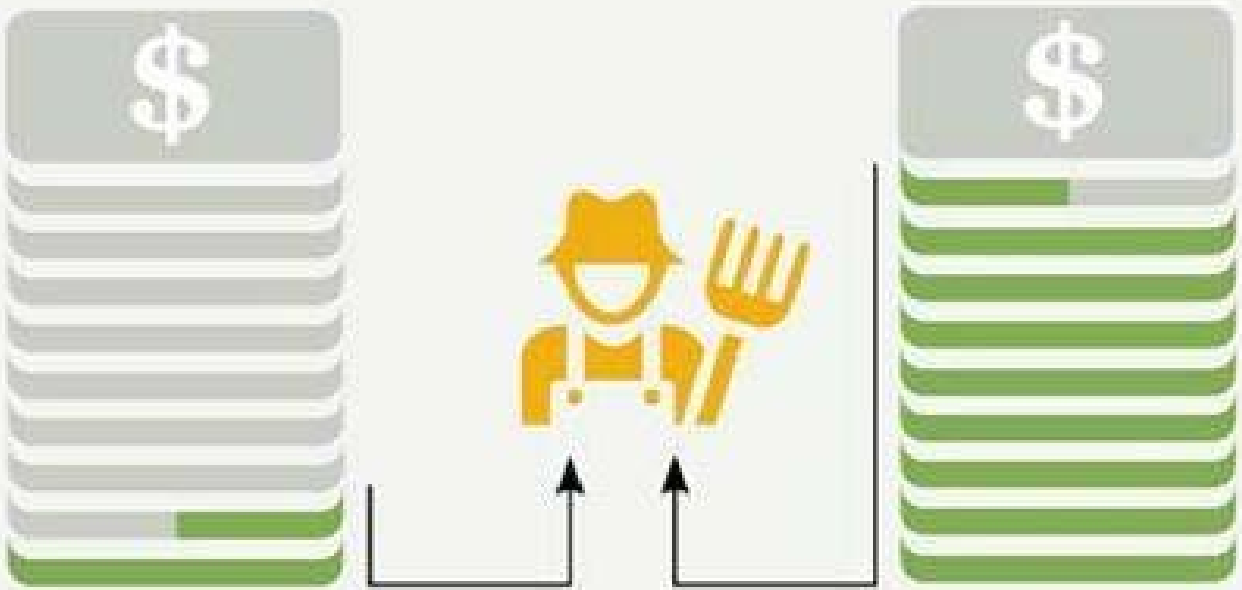
1 Farmers win.



In general, farmers and ranchers only receive $1.55 of $10 spent on food. The rest goes to marketers, processors, wholesalers, distributors and retailers.

For every $10 spent on local food, **farmers get closer to $8–9.**

American Farmland Trust

Documented consumer willingness to pay a premium for local food

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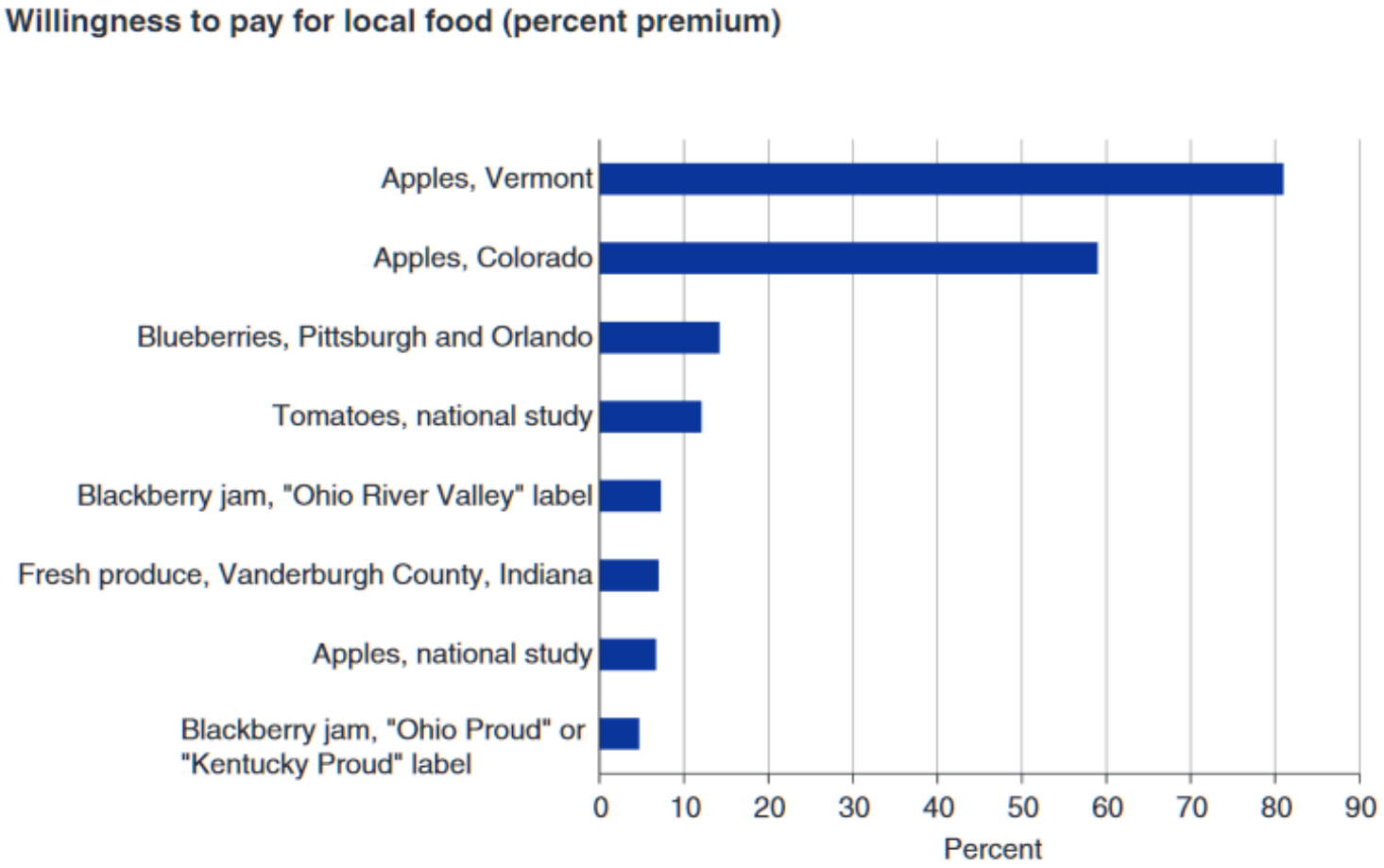


Source: Willingness to pay as a percent of base price calculated from reported results from the following: Apples/ Vermont from Wang et al., 2010, averaged over respondents that had and had not purchased organic food. Apples/ Colorado from Costanigro et al., 2011. Blueberries from Shi et al., 2013. Tomatoes/national and Apples/national from Onozaka and Thilmany, 2012. Blackberry jam from Hu et al., 2012. Fresh produce/Vanderburgh County from Burnett et al., 2011.

Source: Low, S.A., A. Adalja, E. Beaulieu, N. Key, S. Martinez, A. Melton, A. Perez, K. Ralston, H. Stewart, S. Suttles, S. Vogel, and B.B.R. Jablonski. 2015. Trends in U.S. Local and Regional Food Systems. U.S. Department of Agriculture, Economic Research Service. Administrative Publication Number 067.

Matt LeRoux, Cornell Cooperative Extension of Tompkins County

BUILDING FARMERS
COLORADO STATE UNIVERSITY EXTENSION

Colorado State University EXTENSION

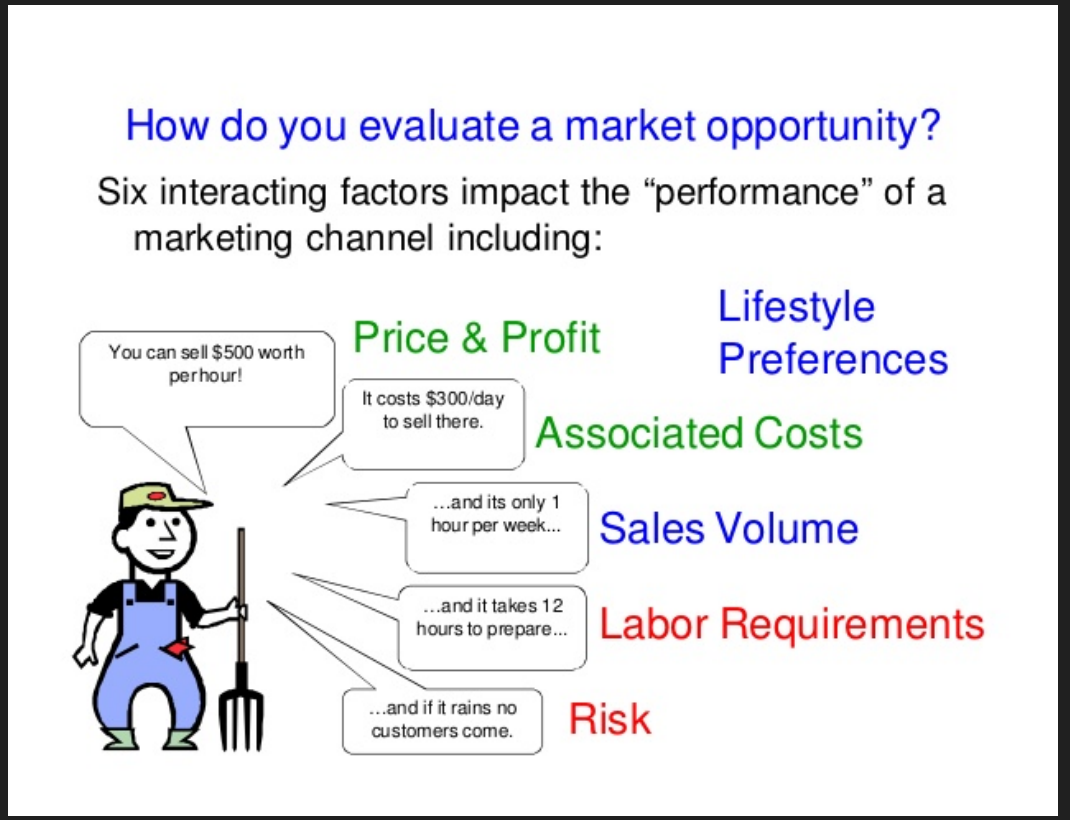
COLORADO Department of Agriculture

COLORADO FRUIT & VEGETABLE GROWERS ASSOCIATION

Colorado Farmers Market Association
connecting farmers and consumers

Market Channel Assessments

USDA Agricultural Marketing Service



Marketing Profit Margin Percentiles, Colorado, Direct Channels

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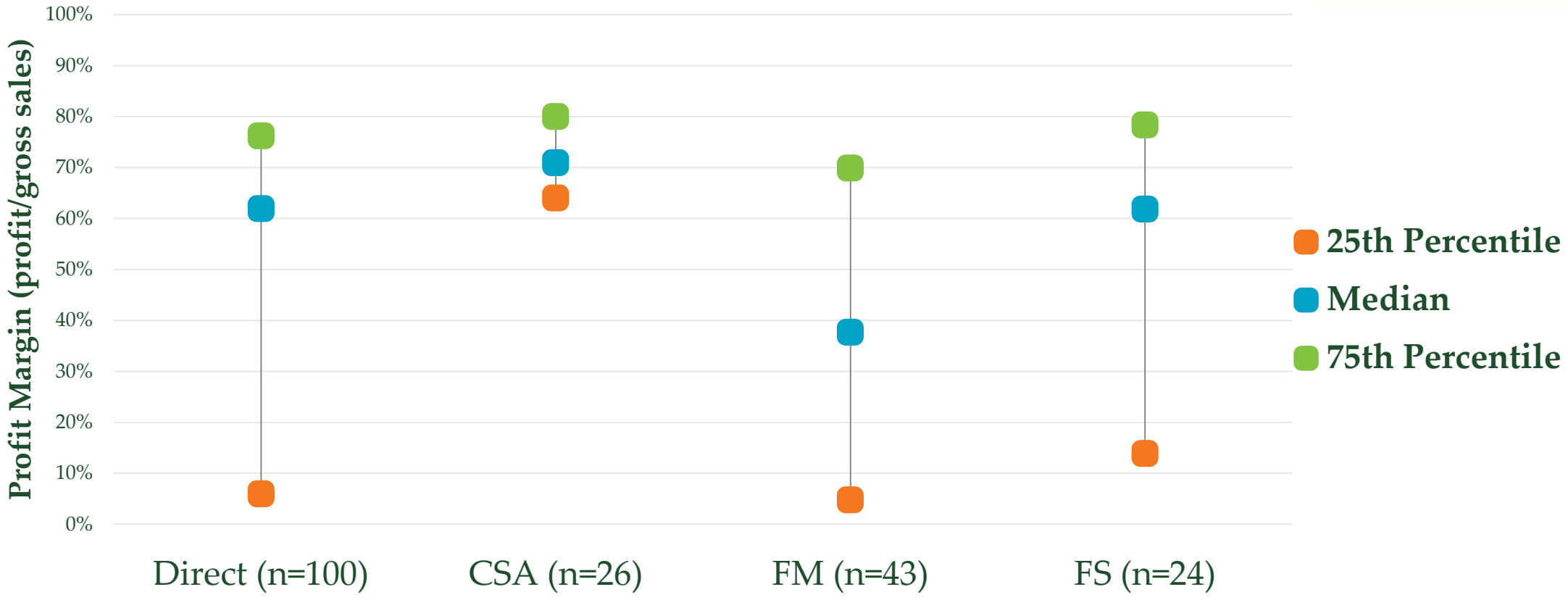
USDA Agricultural Marketing Service



Source: Jablonski, B.B.R., M. Sullins, and D.T. McFadden. 2019. Community Supported Agriculture Marketing Performance: Results from Pilot Market Channel Assessments in Colorado. *Sustainability*.

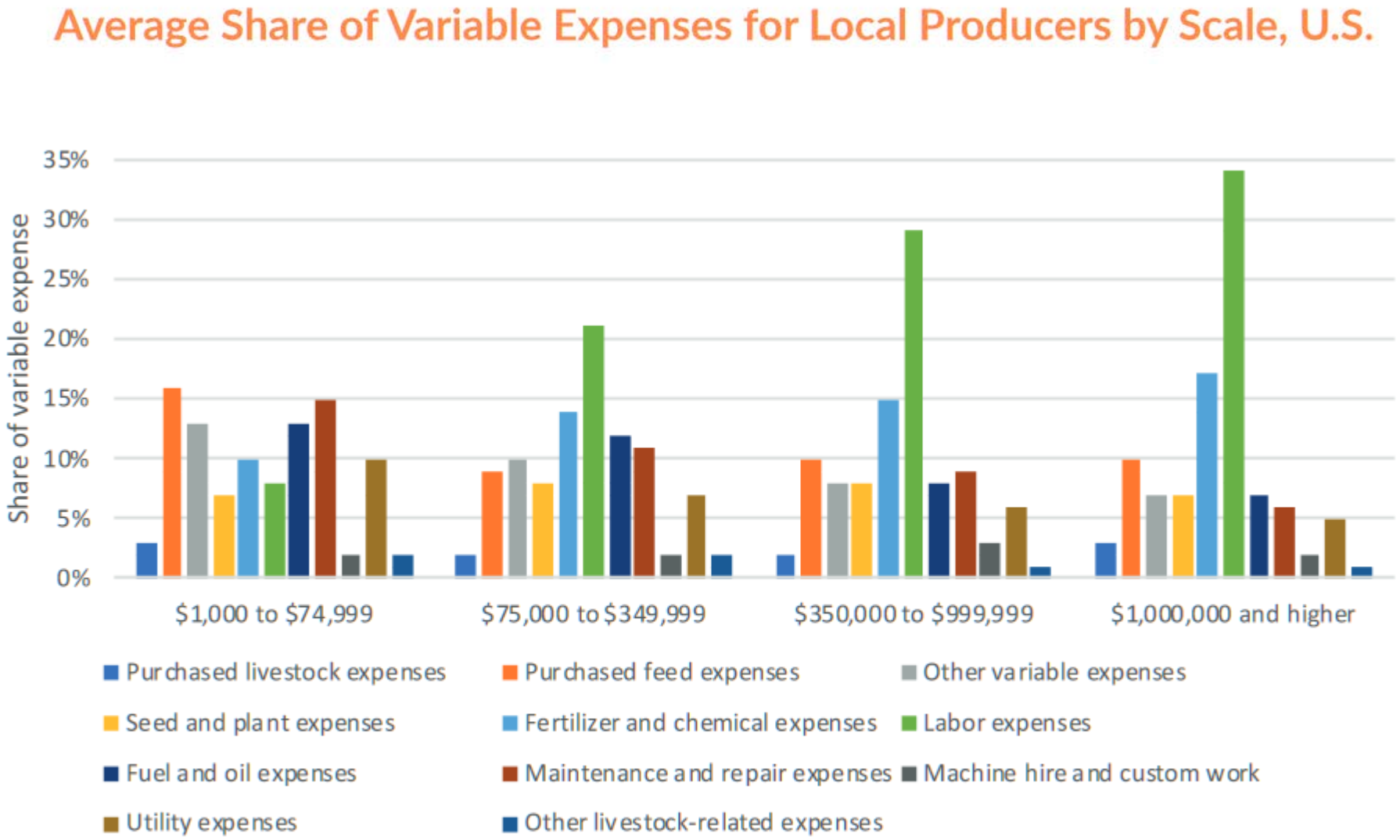
$$\text{Profit Margin} = \frac{\text{Gross sales - Marketing Labor Cost - Travel Costs}}{\text{Gross sales}}$$

National Data: USDA ARMS sample of Local Food Producers, Farmers and Ranchers, 2013

- 2013 Phase III ARMS data
- Nationally representative survey that targets about 30,000 farms, providing annual, national-level data on farm business

	No. of observations	Population size
Market Channel		
D2C	664	124,186
Intermediated	136	11,703
D2CIntermediated	213	24,012
Alllocalfood	1,013	159,901
Nonlocalfood	16,416	1,935,568
Local food producers by farm scale (GCFI)		
1kto75k	534	112,563
75kto350k	214	21,104
350to1Million	104	3,922
Million and higher	107	3,607

The Role of Labor and Other Variable Expenses



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NIFA

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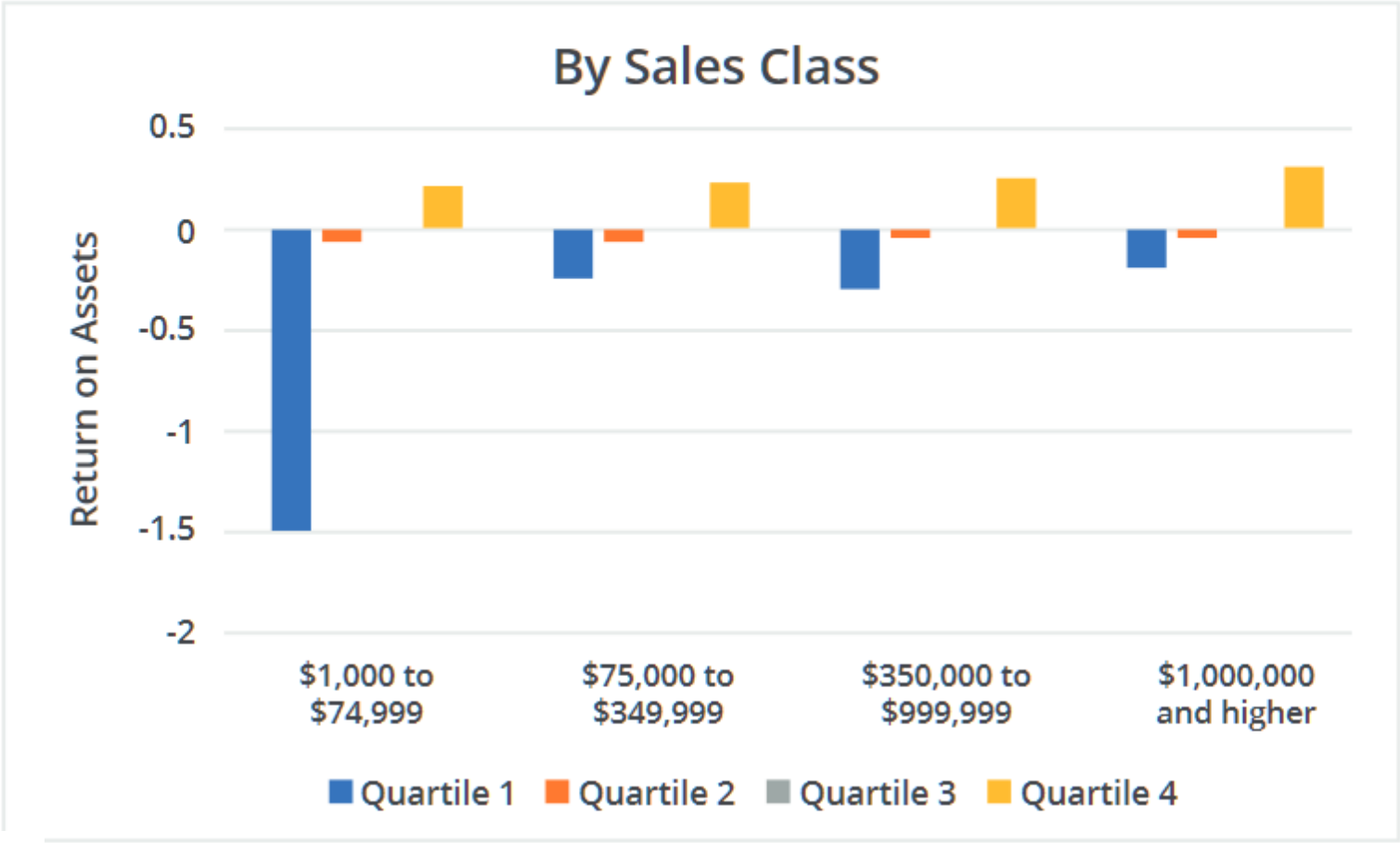
Profitability by Scale and Channel

Return on Assets by Quartile (Quartile 4 is the most profitable)



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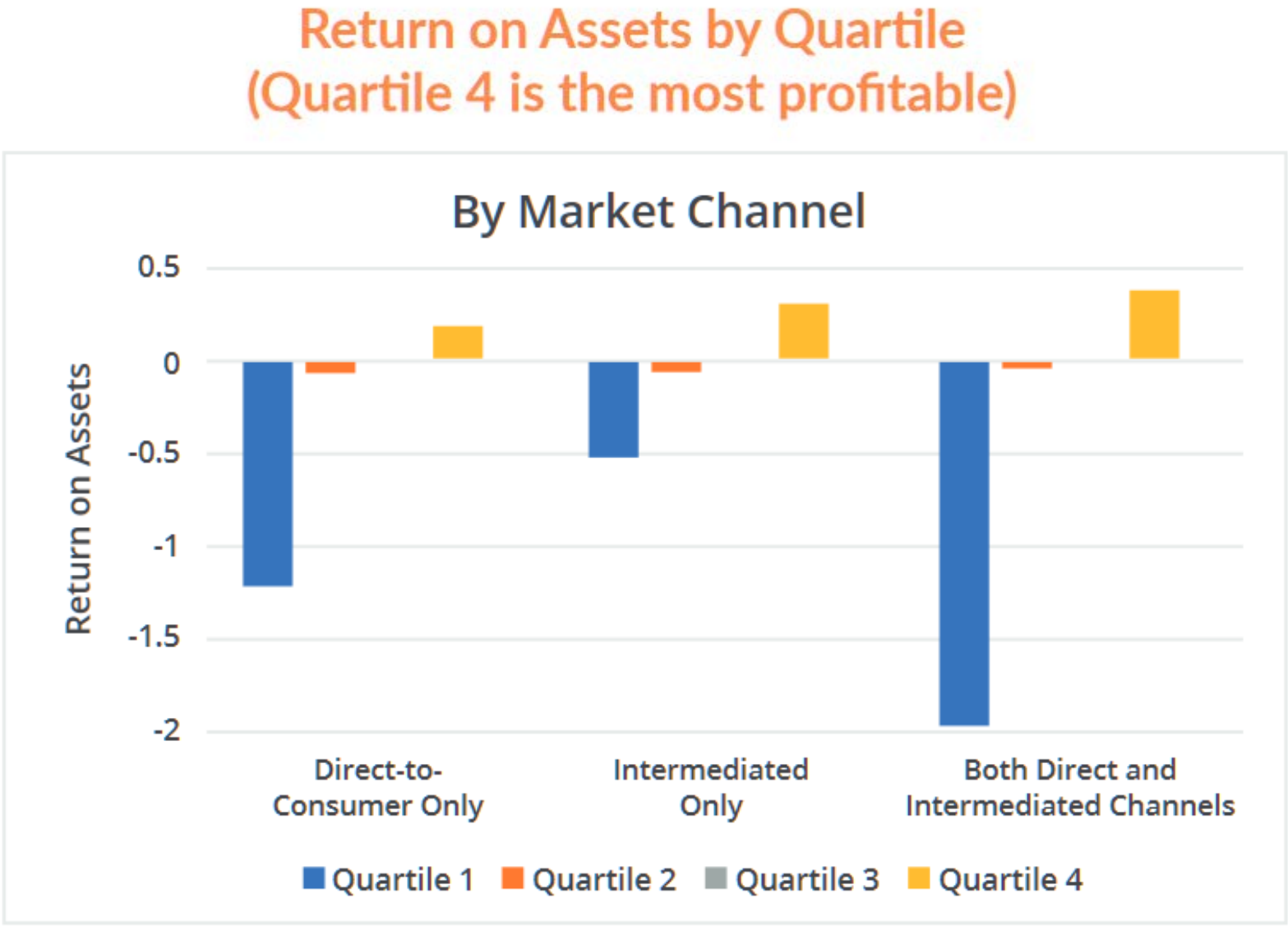

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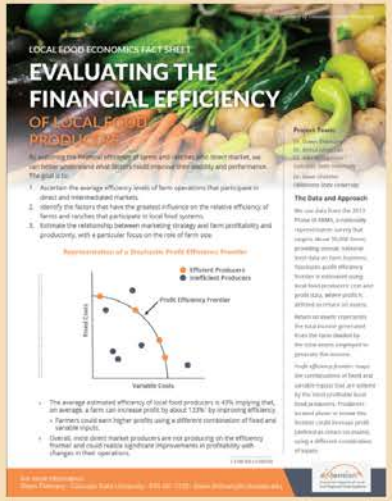
FACT SHEETS

USDA Agricultural Marketing Service

FINANCIAL PERFORMANCE IMPLICATIONS OF LOCAL FOOD ENTERPRISES



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LocalFoodEconomics.com

Urban agriculture

British Food Journal

Urban agriculture: connecting producers with consumers
Carolyn Dimitri, Lydia Oberholtzer, Andy Pressman,

Article information:

To cite this document:
Carolyn Dimitri, Lydia Oberholtzer, Andy Pressman, (2016) "Urban agriculture: connecting producers with consumers", British Food Journal, Vol. 118 Issue: 3, pp.603-617, https://doi.org/10.1108/BFJ-06-2015-0200

- 2012 national survey of urban farmers (n=315)
  - 26% had mission statements focused on markets (others focused on community, education, and food security goals)
    - Social mission primary driver of most operations
  - 28% had a primary farmer earning a living from the farm.
  - “Urban farms face real problems…related to farm survivability and farmer livelihood”

2 Your community wins.

For every $10 spent at a farmers market, studies show that as much as **$7.80 is re-spent in your community,** supporting local jobs and businesses.

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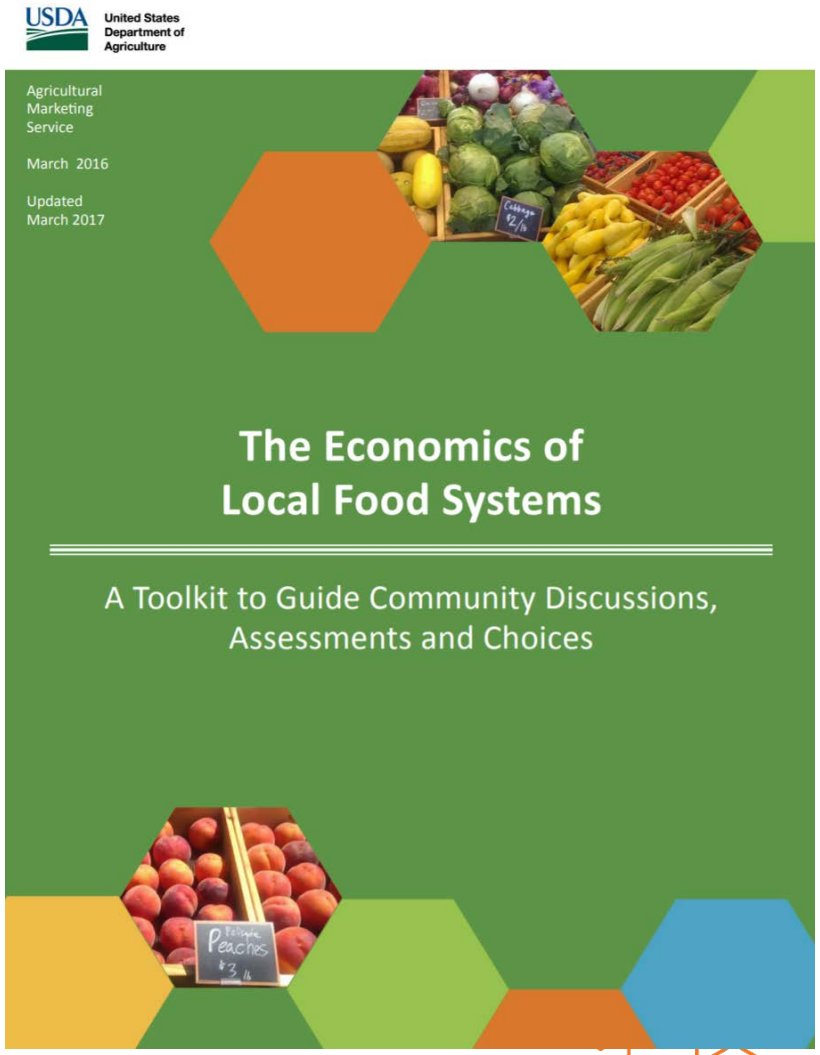
American Farmland Trust

Regional Economic Impacts of Local Food System Investments Generally Demonstrate Relatively Small, Short-Term Gains

- **Impacts on employment, output, labor income**
  - Gunter & Thilmany 2012; Hughes & Isengildina-Massa 2015; Hughes et al. 2008; Jablonski et al. 2016; Schmit et al. 2016; Swenson 2010
- **Spatial econometric models**
  - Deller et al. 2014; Brown et al. 2014

Words of caution in thinking about community economic impacts

- Finite resources (e.g., land, consumers dollars, public dollars) so every decision involves a choice.
- Need to assess the **net** rather than the **gross** impact of changes in food system.
- Can be on supply (production) or demand (consumer) side, or both.



Arable land is likely already in production!

- Study from Midwest estimates county-level fresh fruit and vegetable production potentials and expected sales based on current population.
- Corn and soybean are the dominant crops in these states, and net impacts would occur from shifts to fruit and vegetable.

Source: Swenson, D. 2011. The Regional Economic Development Potential and Constraints to Local Foods Development in the Midwest. Iowa State University

How do farmers respond to new market opportunities?

- Is new market increasing price point? Enabling producers to scale up? Creating a market for seconds?
- Can the intended producer respond to the market opportunity? Do they have the right food safety protocol in place? Do they have access to appropriate infrastructure?

Source: Niche Meat Processing Assistance Network

Evaluating long-term economic impacts more difficult, but potentially where more important impacts lie!

- Farmers' markets as **business incubators** by providing the infrastructure necessary to build skills and gain business experience.
- Regular interactions can generate and circulate **knowledge** that vendors might use to develop new products and creative ways of marketing them.
- Sales income may be less important than the **skills and business experience** developed through participation in farmers' markets.

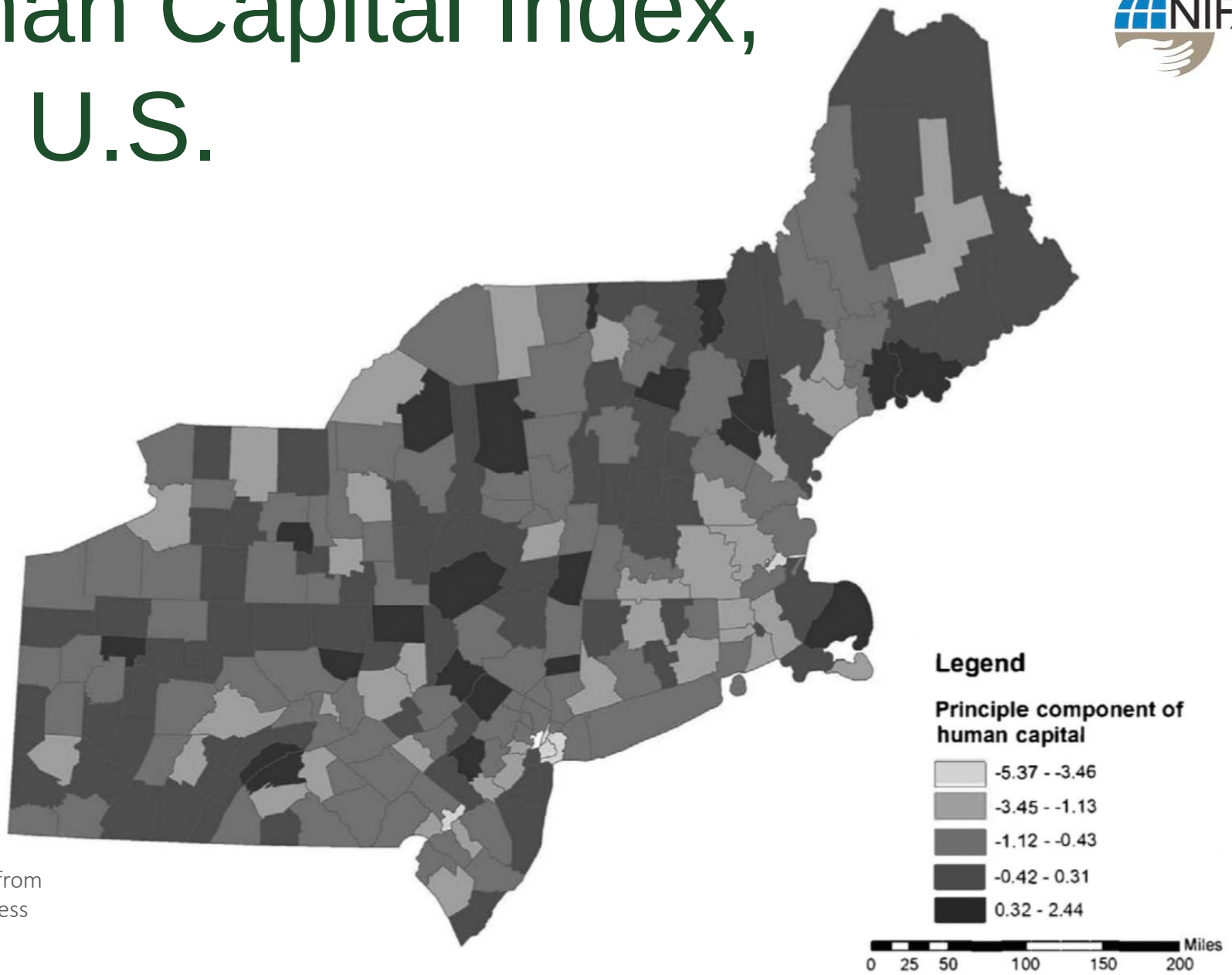
Example: Human Capital

- 75% of farms made (or intend to make) changes to their farm business (ideas for a new product and/or marketing technique) based on these ideas.
- 45% of farms made these changes to product sold in both rural and urban markets.
- 82% reported that they shared ideas (or intend to) that they got through Greenmarkets with farmers in their home communities.

Source; Schmit, T.M., B.B.R. Jablonski, J. Minner, D. Kay, and L. Christensen. 2017. Rural wealth creation of intellectual capital from urban local food system initiatives: developing indicators to assess change. *Journal of Community Development.* 48(5): 639-656.

Stock of Human Capital Index, Northeastern U.S.

*Stocks of human capital significantly higher in counties with Greenmarket farmers



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MOVING
FORWARD

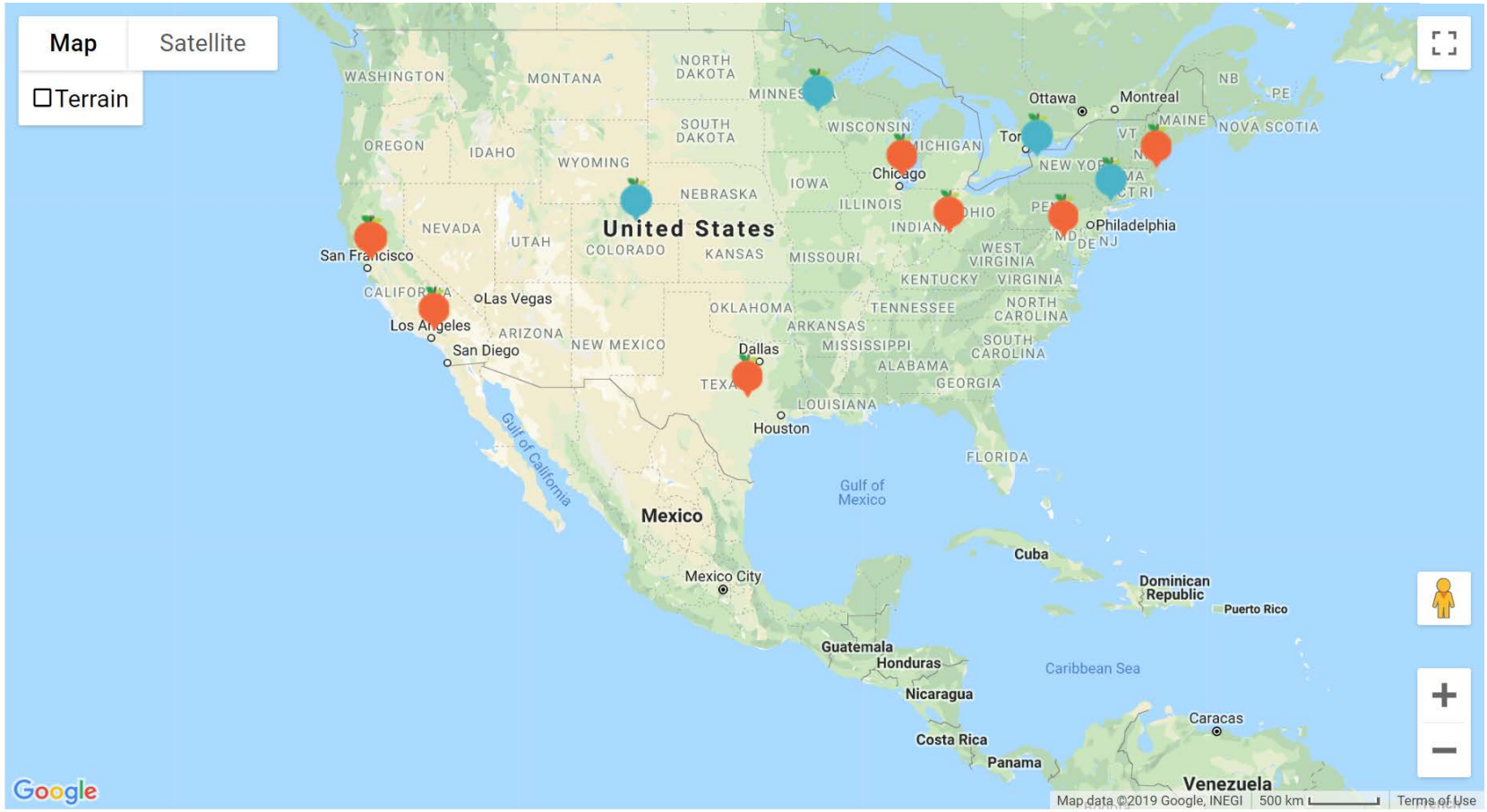
IF we are going to leverage procurement opportunities, are the ‘right’ people at the table?

Denver Food Procurement Committee

- Denver Sustainable Food Policy Coalition
  - One of Denver's Mayor-appointed Boards and Commissions
  - Created the City Food Purchasing Standard Policy Working Group in 8/2017 (Resolution 007-2017)
  - Adopted Issue Brief for City Food Purchasing Standard 6/2018 (014-2018)
- In the Brief:
  - "Sustainable Food" is defined by the Good Food Purchasing Standards

Good Food Purchasing Program

CENTER FOR GOOD FOOD PURCHASING
BUILDING A VALUES-BASED FOOD SYSTEM



= INSTITUTIONAL PARTICIPANTS = POLICY ADOPTIONS

Good Food Purchasing Program

- Local Economies
- Environmental Sustainability
- Valued Workforce
- Nutrition
- Animal Welfare

PLEASE JOIN US!

IN GUNNISON, COLORADO

For a convening of growers, buyers, and policymakers, to discuss how market opportunities in the Denver metro area can support the specialty crop industries in the San Luis Valley and Western Slope.

DECEMBER 9TH
6PM

|| Dinner and Happy Hour ||

High Alpine Brewing
111 North Main Street

DECEMBER 10TH
8:30AM-3:30PM

|| Market Opportunity Discussion ||

Western State University
South Ballroom

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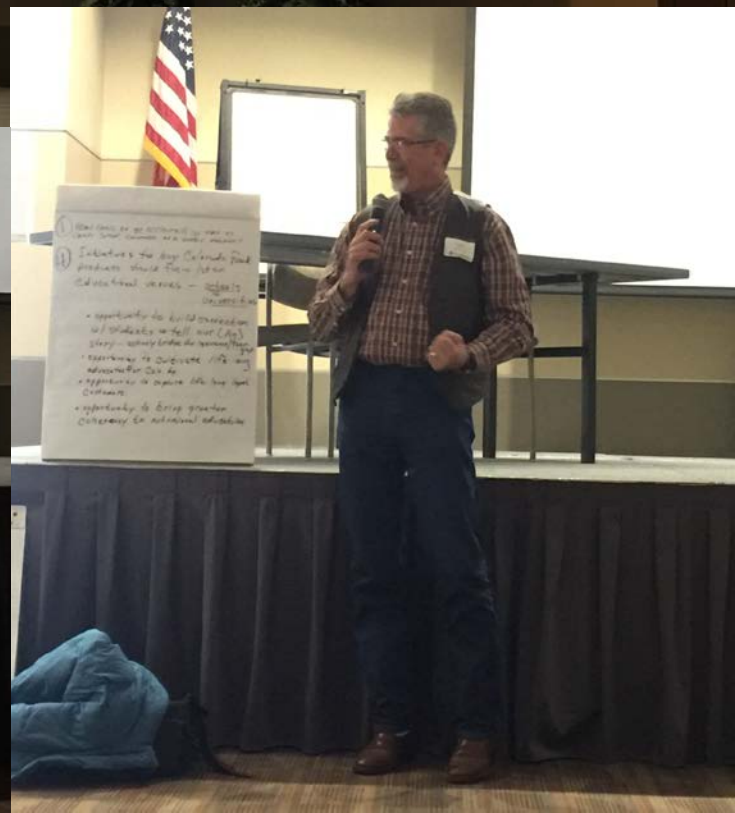
CSU activities and changing industry/food systems research agenda


City of Denver Needs
DENVER
CONNECT WITH US 311 | POCKETGOV | DENVERGOV.ORG | DENVER 8 TV


SUN VALLEY FOOD HUB
Recommission existing Steam Plant
- Iconic "Tate Modern" Building
- 65,000 SQFT ground floor space
- 40,000 SQFT Public Hall; 25,000 SQFT Event and Makers Hall
- 2nd Floor Office, Commissary, Entrepreneur Center
Planned Build: Produce & Protein Processing Center
- 100,000 SQFT custom built, USDA aggregation, processing, and distribution center
Planned Build: "Producers Alley"
- 50,000 SQFT custom built facility to house small to mid scale: Dairy, Specialty Meats, 2nds Market, Seafood, Spirits



Producer Meetings

Scenario Analysis: Wheat

1. Colorado-source identified whole grain white wheat (snowmass)
   - Segregated grain elevators/distribution
2. Certified Organic, Colorado-grown wheat
3. Good Food Purchasing Program preference for 3rd party environmental stewardship certifications

FFAR
Foundation for Food and Agriculture Research

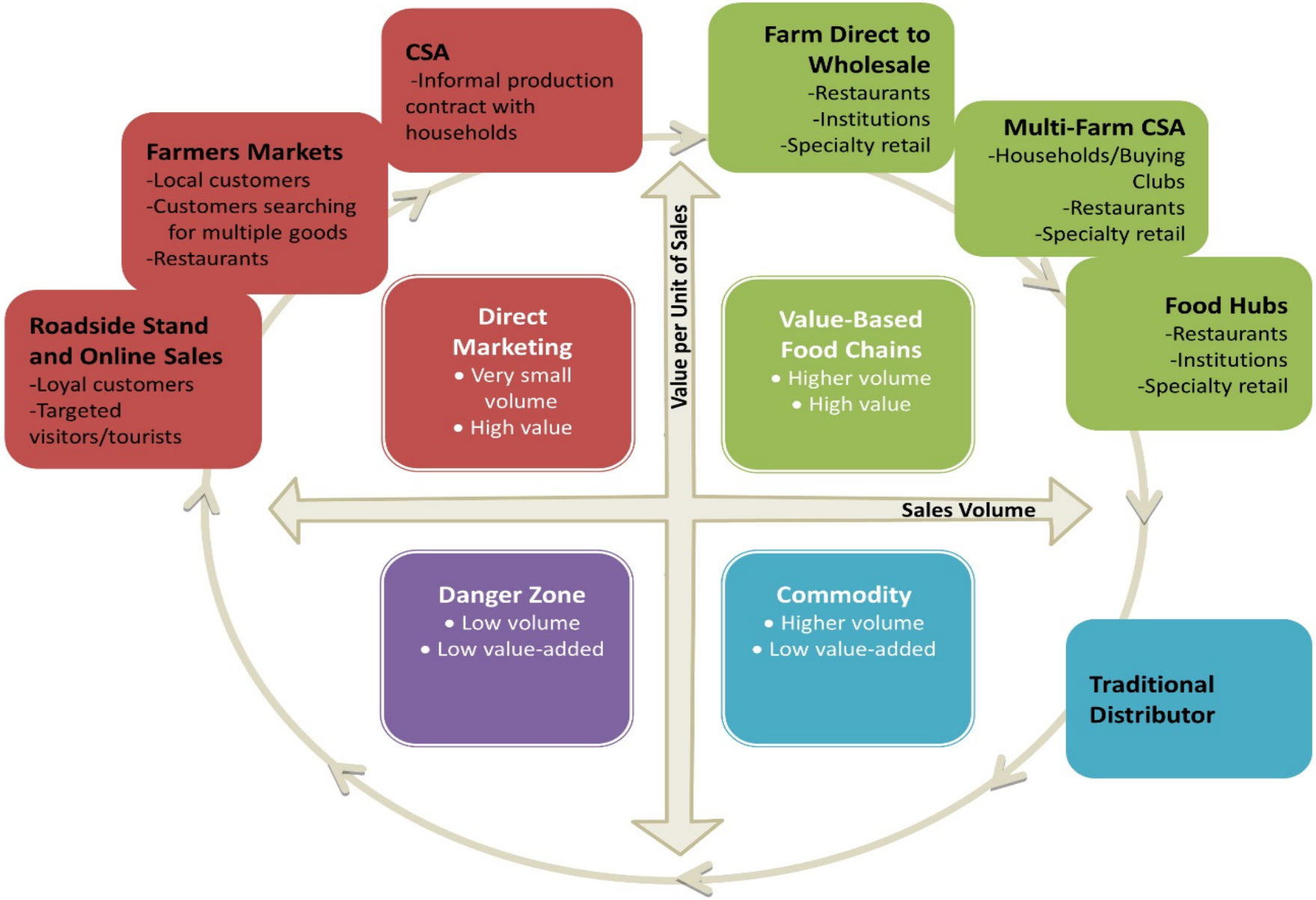
Our Partners

Colorado Beef Council
Colorado Dairy Farms
Colorado Department of Agriculture
Colorado Department of Education
Colorado Department of Human Service
Colorado Department of Local Affairs
CO Department Public Health and Environment
Colorado Farmers Market Association
Colorado Food Systems Advisory Council
CO Fruit and Vegetable Growers Association
Colorado Pork Council
Colorado Potatoes Administrative Council
Colorado State University Food Systems
Cooking Matters
Denver Museum of Nature and Science
Denver Public Health and Environment
Denver Sustainable Food Policy Council
Denver Urban Gardens
Farm Bureau
LiveWell Colorado
National Bison Association
National Western Center
National Young Farmers Coalition
Rocky Mountain Farmers Union
Western Colorado Horticultural Society

For institutional procurement strategies to work, need to consider:

1. Are you creating markets that will work for the scale, commodity, etc. of producer at the table?

Different business models will work for producers based on competitive advantage

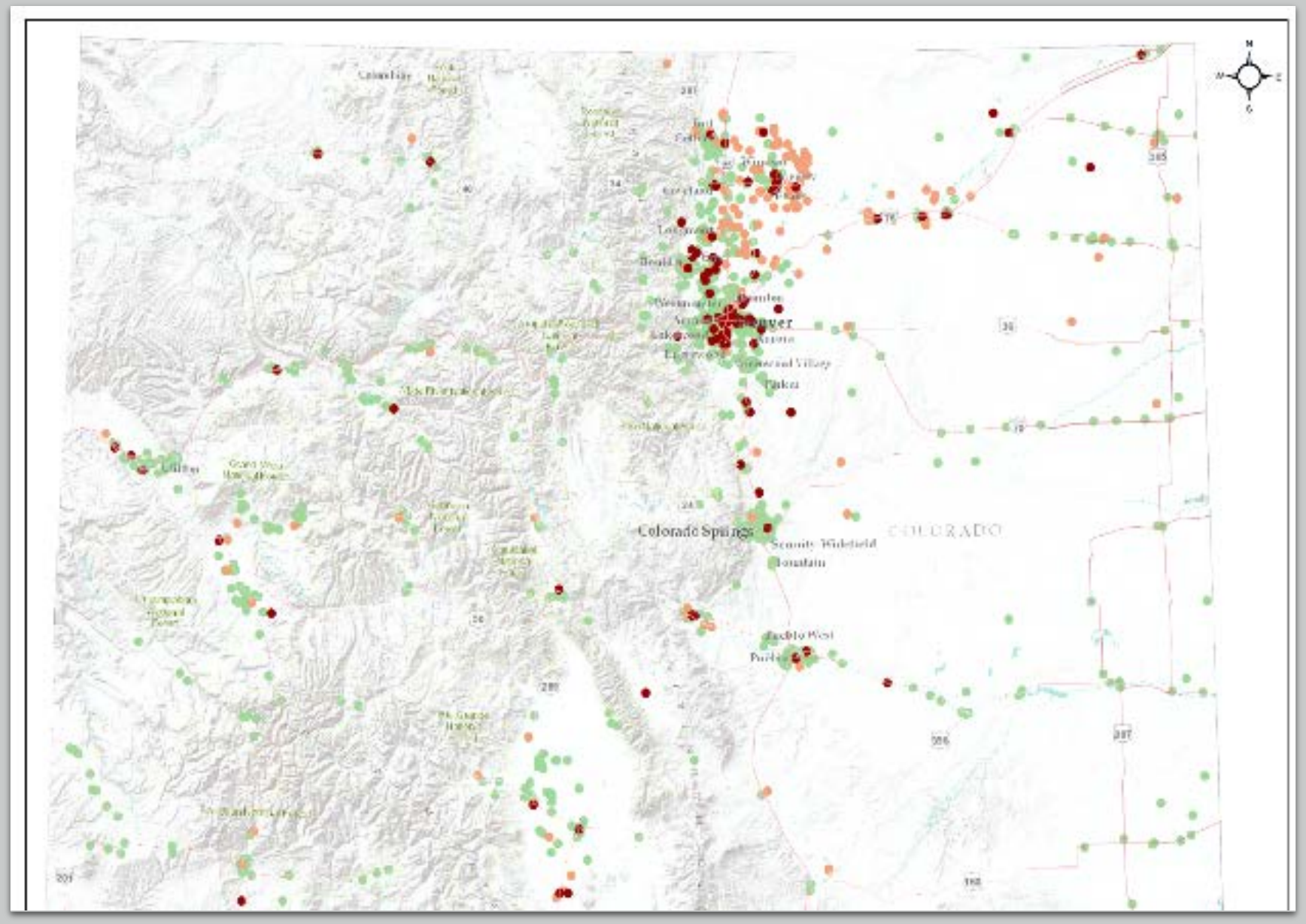


Source: https://dyson.cornell.edu/outreach/smart-marketing-newsletter/

For institutional procurement strategies to work, need to consider:

1. Are you creating markets that will work for the scale and commodity of producer at the table?
2. Is the right infrastructure in place?

Better to utilize underutilized assets BEFORE making new investments



Manufacturing facilities, Colorado, 2016

For institutional procurement strategies to work, need to consider:

1. Are you creating markets that will work for the scale and commodity of producer at the table?
2. Is the right infrastructure in place?
3. Heterogeneity of products and processing systems makes things complex! (example: traceability with wheat)

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