### **AURI Connects: Webinar Wednesday**

a monthly webinar series hosted by the Agricultural Utilization Research Institute

Every 2<sup>nd</sup> Wednesday 12 pm - 1 pm CT

www.auri.org/webinar-wednesday/







### **Assumed Problem Statement**



There is a lack of capacity or access to affordable, rightsized manufacturing in Minnesota for growing, **readyto-scale** food and beverage businesses.



- 1. Is this the problem that needs to be solved, and what is the associated economic opportunity?
- 2. What "right-sized" manufacturing capacity and capability already exists?
- 3. What "right-sized" manufacturing capacity and capability needs to be built?
- 4. What are the ecosystem hurdles to address this problem?









### Should I "Self-Manufacture", or

#### **Bricks & Mortar**

#### **Shared Commercial Kitchen**

• rent time in shared space

### Leased Space Kitchen

- dedicated space
- Food Hub

Accelerator/Incubator

### Should I Use a Copacker?







### **MDA "Copacker Directory"**

### http://bit.ly/mdafoodbiz

#### Co-packer Directory

A co-packer (or contract packer) is a term used to describe a business that processes and packages products for other businesses, under contract. Food companies/brands often use a co-packer to make their products, to avoid high startup, labor and/or "brick and mortar" costs, or to have their products made closer to their markets or distribution hubs. Many co-packers also help with product formulation, labeling, and certification of a new product; some may also help with product marketing/sales and distribution. Co-packer *agreements* are very important, and finding a co-packer willing to make small batches of product can be difficult.

For more information on using co-packers, see:

- An Insider's Guide to Co-manufacturing (PDF: 398 KB / 3 pages) Institute of Food Technologists
- Food Processing Using a Co-Packer (PDF: 180 KB / 2 pages) Oklahoma Cooperative Extension Service

Location	Co-Packer	Type of Products	
Albert Lea & Owatonna MN	Zumbro River Brand	High protein & specialty extruded snacks, cereals & crisps; powdered products	
Arden Hills MN	Northwestern Foods, Inc.	Dry mixes	
Bemidji MN	InHarvest Inc.	Grains, rice, beans & lentils	
Bloomington MN	Fiberich Technologies, Inc.	Legume flours, high fiber baking concentrate flour	
Bloomington MN	Nikola's Foods / Nikola's Bakery	Baked goods	







Question	Grain free clusters (left 2.5 yrs ago)	Natural Snacks (left 1.5 yrs. ago)	Functional Health Bevvies (left 5 mo. ago)
Use MDA site?	Yes	No answer	Did not know about it
Top reasons for move	could grow with them, gluten free cert., ingredient ordering help	An opportunity to rent from a lg. kitchen in CO. Facility was food ready & certified, so no build out. Could not find an equal or better opportunity in Rochester MN. At the time, one partner was living in MN, the other in CO. The MN partner was tired of cold winters (MN)	Minimum run size, bottle/closure capabilities, pricing, the owner, organic certification
Why not MN?	No GF options here		Better terms elsewhere
Results from move	growth	\$100K sales to \$850; 75 – 1,200 stores	TBD
Anything Mn can do to get you back/keep you?	flexibility, ovens, GF certs, ability to grow/scale a company	Cash/working capital is the absolute #1 concern of our company, and most all of the natural food startups that we are aware of. If there were large enough incentives that helped with that arena, that would probably help entice us.	We could definitely use another beverage co-packing facility, (one that's not monopolized by Monster energy drinks) preferably one that's certified organic and maybe even HPP.

### **Goals/Questions** -

- Identify/list more copackers?
- Need better co-pack match-making and promotion?
- Cultivate more local copackers?
- Incentives to *Manufacture here*?







### A brief look at the key findings

- Affordable, accessible, and "right sized" Food and Beverage Manufacturing (F&B Mfg) is a national problem – and <u>Minnesota can lead in finding solutions</u>
- 2. Minnesota can unlock significant GDP growth through investment in F&B Mfg
- 3. Solutions must address multiple issues
  - a) Availability of "right-sized" F&B Mfg capacity
  - b) Encouraging investment in F&B Mfg to unlock the economic reward
  - c) Connecting small brands with the appropriate "right-sized" F&B Mfg
  - d) Breaking down barriers between brands and manufacturers







## The Amazing Chickpea

The Amazing Chickpea Product Lines The Amazing Chickpea Chickpea Pancake Mix Chickpea Pizza Crust Mix Amazing Chickpea 3a 120 Amazing Chickpea Amazing Chickpea The Amazing Chickpea Chickpea Pancake Mix Chickpea Muffin Mix<sup>-</sup> Crickpea Butter Cookie M 39 120 Amazing® Chickpea hickpea Fudge Brownie Mix 5 Minute Hummus Mix Chickpea Chocolate Chip Cookie Mix Muffin Mia Amazing Chickpea 3a) 50 he Amazing Amazing The Amazing Chickpea Judge Brownie Mis Chickpeă FREE! GLUTEN-FREE! PEANUT BUTTER TA Chickpea The NET WT 7.5 OZ (212g) ate Phin Pooble Mix 5 Minute Hummus Mix" Amazing HOCOLATEY CHICKPEA SPREAD NUT-FREE! GLUTEN-FREE!" No. 44 MARE SERVICE NET WT 7.5 OZ (212g) PEANUT BUTTER TASTE. NO NU NUT-FRI HI S OAN SHING NUT-FREE! GLUTEN-FREE! NFT WT 7.5 OZ (212g Coming Soon! **REGION NINE** DEVELOPMENT COMMISSION **auri** Connects DEPARTMENT OF AGRICULTURE

# Hidden in plain sight

#### Minnesota's untapped wealth in food and beverage manufacturing

Shawn Schloesser & Sam Smith Region Nine Development Commission, Mankato







## Where we are...

... and where things may go







# Top tier for jobs and businesses

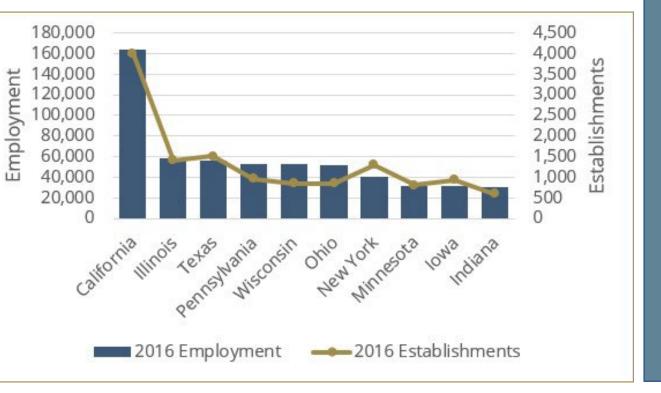
- 8th nationally for number of jobs
- 11th nationally number of establishments











# 13th for relative employment

• 13th nationally for number of jobs relative to total workforce

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North Dakota

lowa

Vermont

Wisconsin

South Dakota

4

3

2

1

0

Idaho



Kansas

Arkansas

Nebraska

Kentucky

Maine

Oregon

Top 15 states for number of jobs as a proportion of the total workforce



California

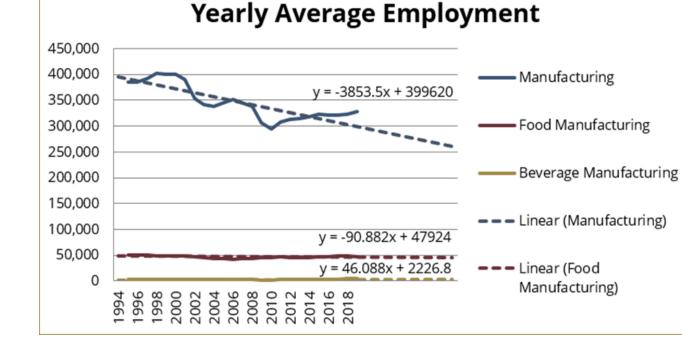
Missouri

Minnesota

# Manufacturing jobs in Minnesota

- Linear analysis suggests total number of manufacturing jobs may decline in Minnesota, although recent years have reversed this trend
- Food and beverage manufacturing have much lower (**BUT STABLE**!) employment numbers

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Historical and projected yearly average employment

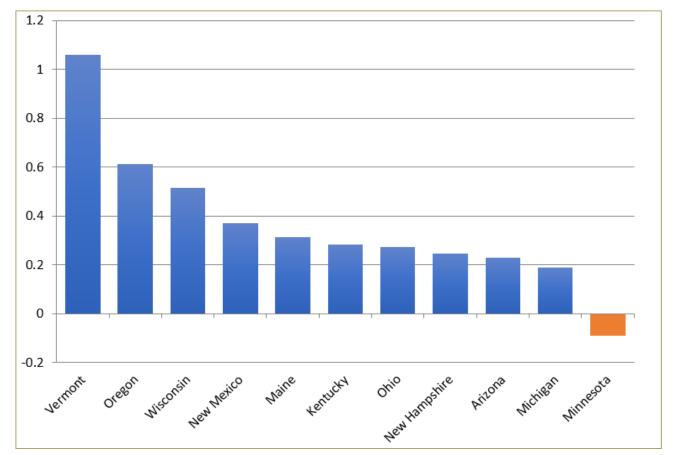






# But... 32nd for relative growth rate

- 1998-2016
- 31 states grew faster
- Growth lagged national average



Top 10 states, plus Minnesota (32nd) for growth compared to national average







## Input-output analysis

Economic projections based on Bureau of Economic Analysis tools

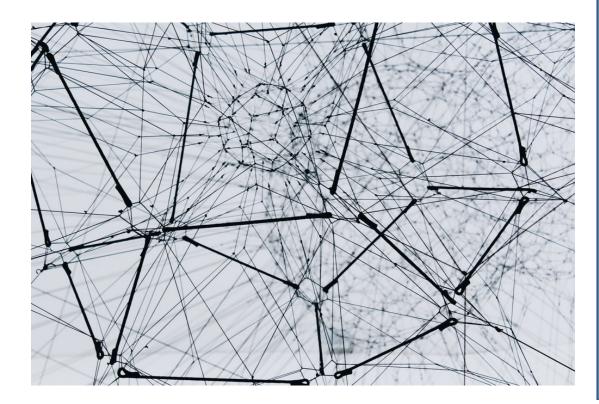






### **RIMS-II** overview

- Regional Input-Output Modeling System (RIMS)
- How turning one dial affects the rest of the economy
- Customized for state and region
- Multipliers used
  - Value added (GDP)
  - Earnings (payroll)
  - Employment (jobs)









## Value-added

Rank	Minnesota industry	Output per \$1 inv.
1	Food and beverage and tobacco product mfg	2.8430
2	Funds, trusts, and other financial vehicles	2.5194
3	Transit and ground passenger transportation	2.3098
4	Truck transportation	2.2528
5	Apparel, leather, and allied product mfg	2.2355
6	Securities, commodity contracts, and other financial investment and related activities	2.2184
7	Construction	2.2113
8	Paper manufacturing	2.2041
9	Social assistance	2.1927
10	Farms	2.1792

- What does "value added" mean to the BEA?
- Greater **STATEWIDE** ROI than any other industry
- 5% increase in F&BM output:
  - \$11 Billion additional impact
  - 167,000 jobs statewide







## Earnings

Rank	Minnesota industry	Earnings per \$1 inv.
1	Pipeline transportation	0.8753
2	Ambulatory health care services	0.8485
3	Administrative and support services	0.8381
4	Securities, commodity contracts, and other financial investments and related activities	0.7891
5	Nursing and residential care facilities	0.7883
6	Social assistance	0.7709
7	Construction	0.7548
8	Hospitals	0.7529
14	Food and beverage and tobacco product mfg	0.5954

• Two likely explanations

- a. Operates with high leverage and is labor intensive
- b. Synergies are not realized, and capacity is underutilized
- Or a combination of both









## Employment

Rank	Minnesota industry	Jobs per \$1M inv.
1	Social assistance	25.3949
2	Food services and drinking places	23.6762
3	Transit and ground passenger transportation	23.5300
4	Nursing and residential care facilities	23.4402
5	Administrative and support services	21.6033
6	Securities, commodity contracts, and other financial investments and related activities	17.7143
7	Farms	17.7047
8	Apparel, leather, and allied product mfg	16.1125
12	Food and beverage and tobacco product mfg	14.8017

• Why the disconnect?

- Earnings + Employment lower than Value-Added
- Suggests option B from previous slide
- Makes STRONG economic case for investment
- Though lower than valueadded (#1), employment and earnings still in top 15 in MN







## **Regional impact**

Multiplier	Top industries (in descending order)	Output per \$1 in top ind.
Value added (GDP)	Animal renderings, poultry, cheese, bread and bakery, frozen foods	\$1.14
Earnings	Cheese, poultry, animal renderings, fats and oils, fluid milk	\$0.74 addt'l hourly
Employment	Animal renderings, poultry, cheese, soybeans, fluid milk	19.1 jobs (per \$1 million)

### Industries with greatest impact on regional economic output







## Bottom line

Food and beverage manufacturing appears to be an untapped (or under-tapped) driver of growth for Minnesota's economy







## Key findings

- 1. Food and beverage manufacturing generates the highest overall returns of any industry in the state
- 2. Data suggest:
  - 1. The industry may either be too labor intensive to grow earnings with output and/or
  - 2. Suffers from under-utilized capacity sharing, i.e., co-manufacturing
- 3. A 5% increase in F&BM output can generate more than \$11 billion in statewide GDP and 168,000 jobs across all industries







### So What's Next?

Formalize findings into research report and post publicly

Form a task force to develop actionable strategies, focused on:

- a) Identifying opportunities to encourage public and/or private investment
- b) Transforming "**information into knowledge**" such as in the case of food safety data collected annually to support brand-manufacturer matchmaking
- c) Closing ecosystem knowledge, communication, and manufacturing capability gaps

Let us know if you have thoughts and are willing to be contacted!

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