

BEMIDJI, MINNESOTA

SPEARFISH, SOUTH DAKOTA

NAPOLEON, NORTH DAKOTA

# Design Thinking Workshops For a Local and Sustainable Foods Future



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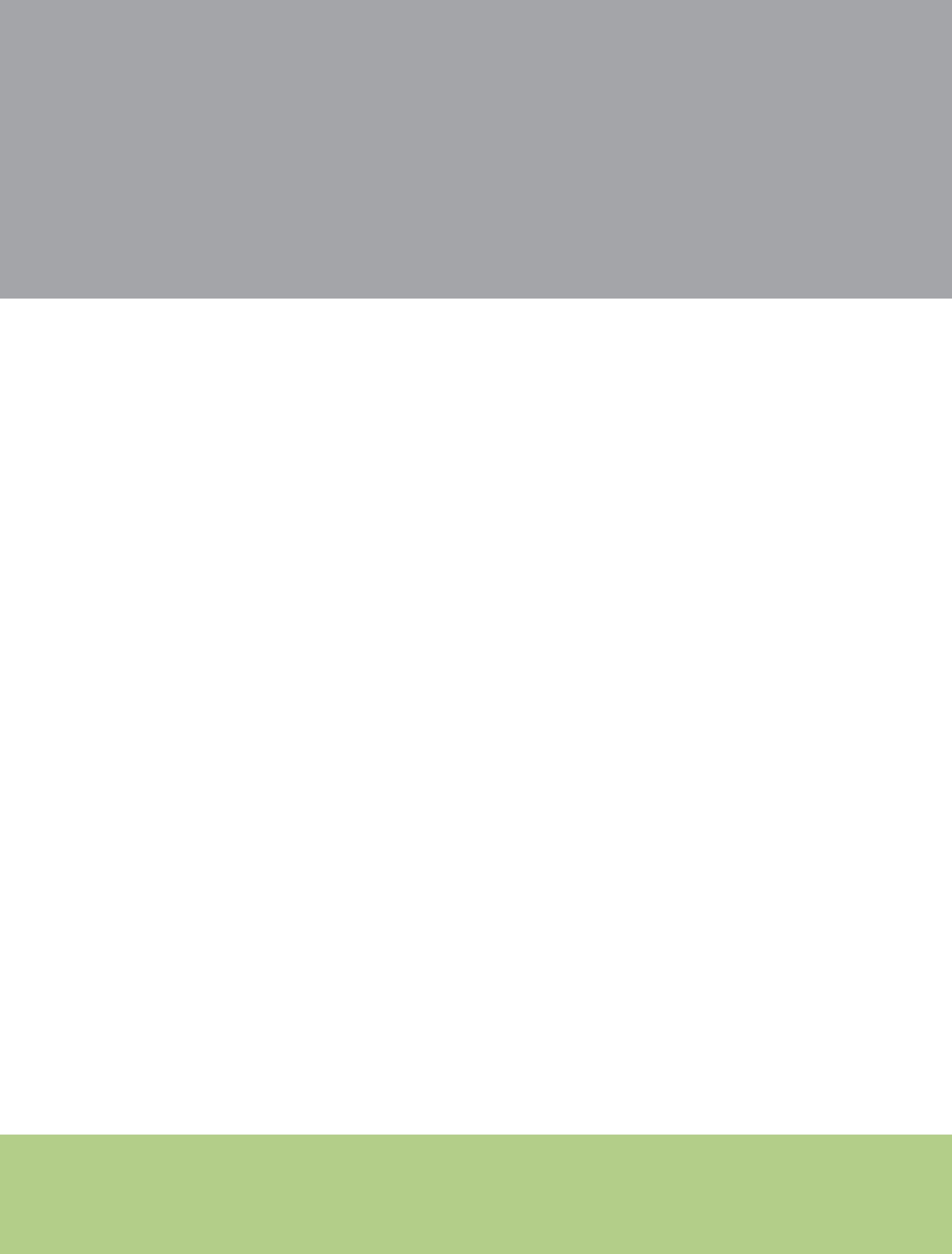
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# INTRODUCTION

**The Design Thinking Workshops documented in this report were a part of the larger SARE project and were conducted during the second meeting in a series of three meetings planned with the communities in North Dakota, South Dakota and Minnesota.**

# overview of **SARE PROJECT**

## **Building Capacity for Local Foods Infrastructure Development**

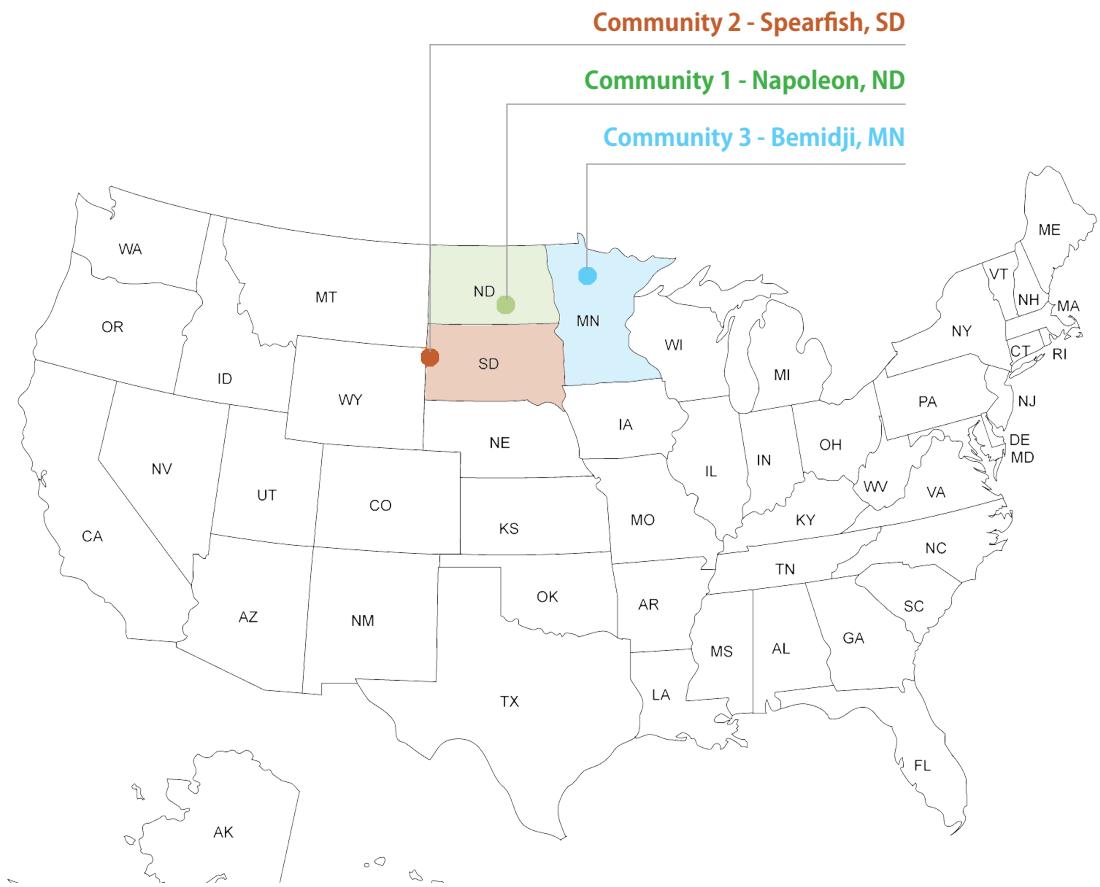
As the local foods movement grows, the capacity to participate will vary for different communities. Small towns and rural communities have differing sets of needs that are based on differences in local geography, infrastructure, transportation networks, economic history, etc. To create tools that can act as a stepping stool to build a continuous increase in local foods capacity, this project will seek the input and advice of producers and local food advocates from three different communities. Each community will represent differing levels of existing local food capacity. The result will be a set of tools that communities can use to expand their ability to grow, produce, buy, and sell local foods regardless of their existing level of local food activity.

**What we will do** Work with a cohort of practitioners in communities (farmers, ranchers, planners, economic development officials, etc) to identify issues, problems, opportunities, etc for communities that are context and scale-specific.

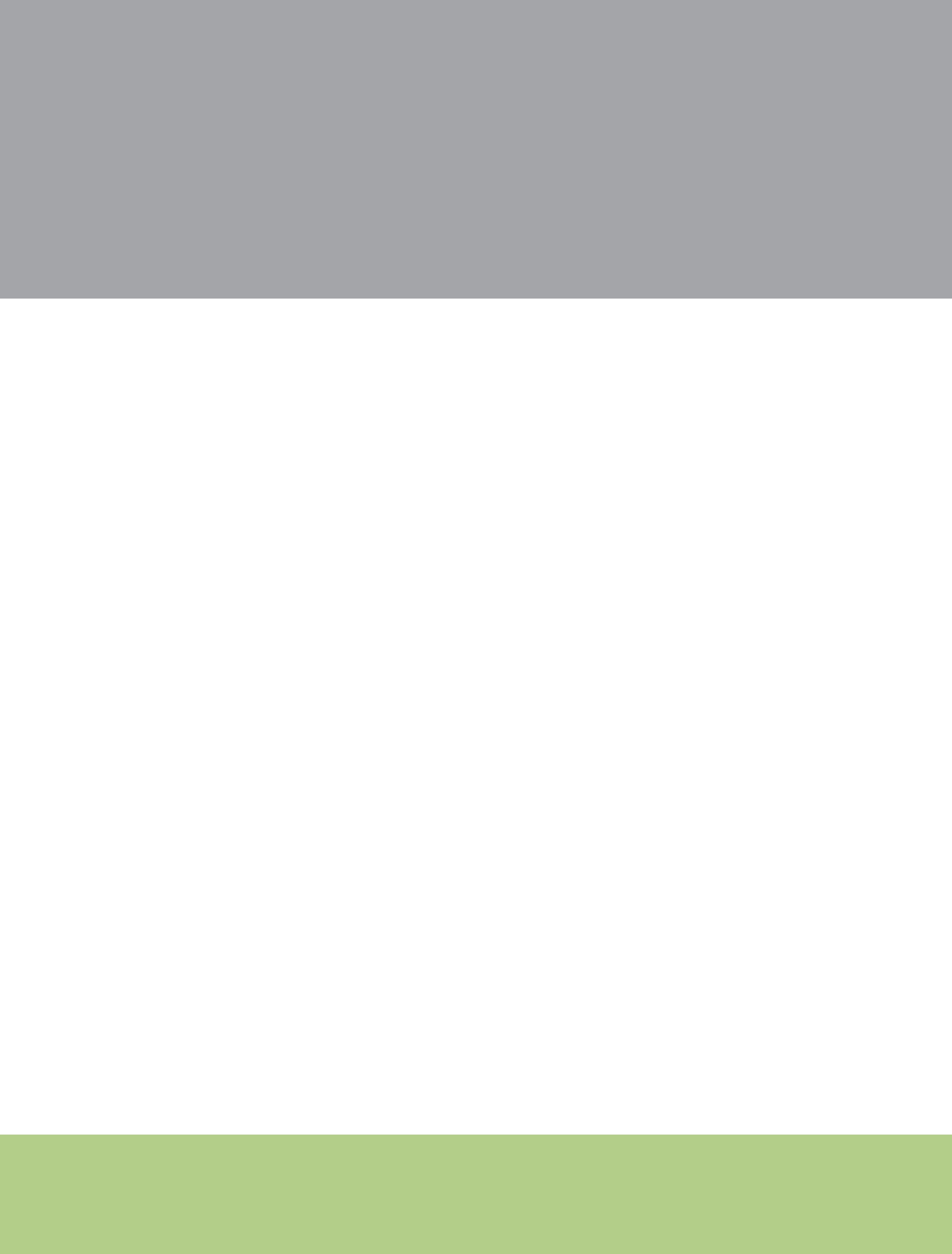
Develop scale appropriate curricula and identify resources for the three communities at varying levels local foods capacity.

Provide networking opportunities both within the communities and between communities. As communities become more fully developed they can learn from those in the 'more advanced' communities to take their level of local foods capacity to the next level.

**How will we do this** Establish a baseline set of needs and goals for each community  
Develop curriculum based on those initial needs and goals  
Provide opportunities for individual and community growth through learning circles, and online tools that are transferable from community to community  
A learning summit that brings together all cohorts to share information and network across state and community boundaries



- What will be the results**
- Ongoing collaboration among communities, regions, and states around local food issues
  - A set of best practices that can be implemented by each pilot community
  - Increased capacity for local food actors to build community food systems
  - A packaged curriculum that will be made available through extension and online
  - A collection of online and print tools and resources for use by local foods value chain participants to strengthen the economic capacity of their communities



# DESIGN THINKING

**The Design Thinking Workshops documented in this report were a part of the larger SARE project and were conducted during the second meeting in a series of three meetings planned with the communities in North Dakota, South Dakota and Minnesota.**

## What is design thinking?

Design Thinking is an emerging field, rooted in the tools and processes used traditionally by design disciplines (architecture, landscape architecture, graphic design, interior design, and others). In a time of unprecedented change where radical innovation is key, design thinking offers a significant way to create solutions to systemic problems that affect our global society. Particularly relevant is the human-centered focus and participatory nature of design thinking – it seeks to address human needs and context using empathy as the basis of creative solutions. The process involves problem definition, field research, generating ideas, story boarding, frequent prototyping and narrative as a mode for engaging participants and motivating action. In recent years, the fields of business, health care and education have been applying design thinking at a rapid pace to the process of redesigning their systems and the experiences of all participants, for example, patients and providers or teachers and students.

## Why is design thinking relevant to the SARE project?

The SARE project seeks to create a set of tools that communities can use to expand their ability to grow, produce, buy, and sell local foods regardless of their existing level of local food activity. To develop the tools, identifying in the needs and goals of the three different communities, with differing capacities, based on their unique context (of local geography, infrastructure, transportation networks, economic history, etc.) is important. Design thinking offers a creative way to identify needs and goals and also solutions, emerging from the community participants as a basis for its tool development.

Specifically, design thinking addresses and supports the following three commitments made by the SARE project:

Work with a cohort of practitioners in communities (farmers, ranchers, planners, economic development officials, etc) to identify issues, problems, opportunities, etc for communities that are context and scale-specific.

Provide networking opportunities both within the communities and between communities. As communities become more fully developed they can learn from those in the ‘more advanced’ communities to take their level of local foods capacity to the next level.

Establish a baseline set of needs and goals for each community.

# design thinking workshop

# INTRODUCTION AND PROCESS

**5 min** Welcome

**10 min** Introduction Exercise

Tell us about who you are and what you'd like to get from this workshop. Share an object or memory from your life that is meaningful from the point of view of local foods, sustainability, and creativity.

**2 min** Purpose of this Workshop

The purpose of this workshop is for you to evolve a creative vision and implementation plan for a local foods future for the community.

**5 min** MindMapping exercise

This is a quick way to generate ideas, see how our brains work in interconnected, similar and uniquely different ways.

In the mind-mapping exercise, attendees were asked to begin with the word 'happiness' and create their mind maps with descriptions of this word in relation to themselves. This short exercise was a way to warm participants up to sharing their ideas and thinking about their personal goals and values. Looking at the mind-maps which were created in this session there are clear patterns. The first thing most participants mentioned was their family and children, this was followed by friendships/relationships, job/hard work, weather/sunshine, accomplishment/goals. While each map varied slightly, it was interesting to see the common values and goals of the individual in this community.

**5 min** Levels of the Local Food system

There are four levels that can exist within a local food system.

**45 min** Food Experience: Design Thinking Exercise

This exercise is structured around the question "Describe some meaningful food related experiences in your life?" at a personal scale.

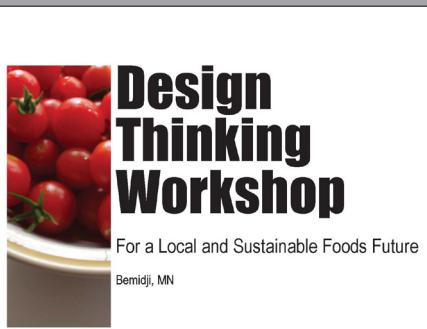
6min Interview each other (3 minutes each)  
Take notes from your first interview

6min Dig Deeper (3 minutes each)  
Take notes from your second interview

Now consider the question at a community scale "Describe some meaningful local food experiences in the community?"

6min Interview each other (3 minutes each)  
Take notes from your interview

3min Capture Findings  
Describe needs in verbs  
(What is the community trying to do?)



slide 1



slide 6



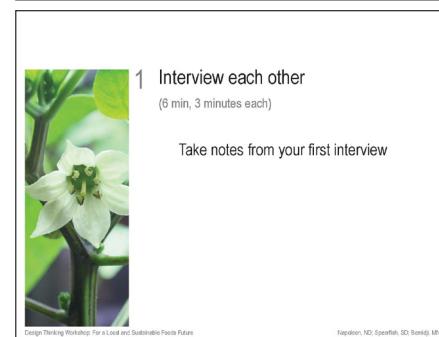
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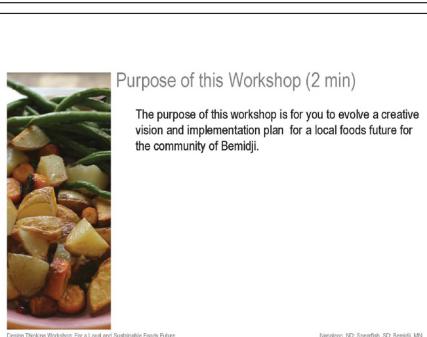
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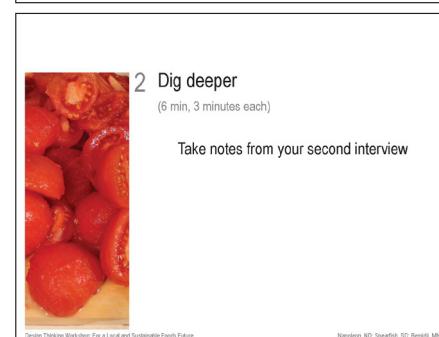
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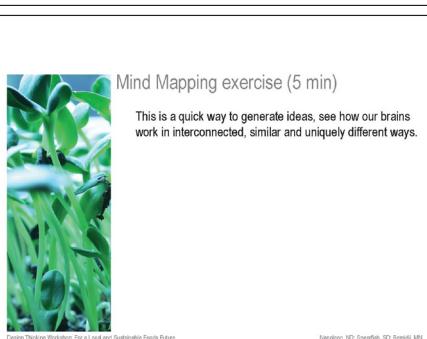
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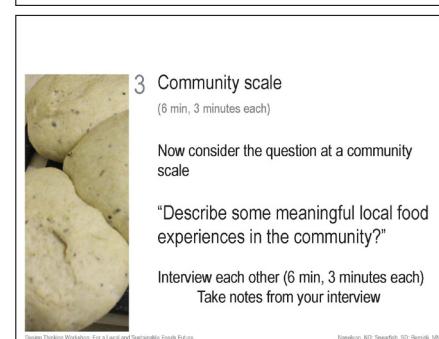
slide 4



slide 9



slide 5



slide 10

# design thinking workshop

# INTRODUCTION AND PROCESS

Describe insights  
(What did you learn about your community's viewpoint or situation that would help your design?)

- 3min Define Problem Statement  
Our community needs a way to \_\_\_\_\_ (community's need)  
because//but \_\_\_\_\_ (insights about community situation)
- 5min Draw 3 creative solution ideas
- 8min Share solutions and capture feedback (4min each)
- 7min Build solution
- 5min Share solution and get feedback
- 30min Visioning your Local foods future**  
15min Develop your vision  
The rules for Visioning  
Anything is possible  
Radical ideas  
Ideas that bring joy  
Describe your vision for the community in 2-3 sentences.  
Our vision for community of Spearfish's local foods future is :  
\_\_\_\_\_  
10min (Identify 3-5 goals that would support the vision you developed )
- 30min What did we learn so far? Circle**
- 10min What tools and resources do you need to reach your local foods vision?**
- 30min Refining and Implementation**  
Translating your vision into action steps  
15min Where do you want to be in 1 year? In 3 years  
15min What small steps do you need to take next – next week, next month, in six months to get there?
- 15min Reporting back**
- 5min Wrap up**

## slide 11

### 4 Capture findings

(3 min)

Describe needs in verbs (what is the community trying to do?)

Describe insights (what did you learn about your community's viewpoint or situation that would help your design?)



Design Thinking Workshop: For a Local and Sustainable Foods Future

Napoleon, ND; Spearfish, SD; Bemidji, MN



Design Thinking Workshop: For a Local and Sustainable Foods Future

### 9 Share solutions and get feedback

(5 min)

Napoleon, ND; Spearfish, SD; Bemidji, MN

## slide 12

### 5 Define Problem Statement

(3 min)

Our community needs a way to \_\_\_\_\_ (community's need)

Because/however/but..... \_\_\_\_\_  
(insights about community situation)



Design Thinking Workshop: For a Local and Sustainable Foods Future

Napoleon, ND; Spearfish, SD; Bemidji, MN



Design Thinking Workshop: For a Local and Sustainable Foods Future

### Visioning your Local foods future

Develop your vision (15 min)

The rules for Visioning:  
Anything is possible  
Radical ideas  
Ideas that bring joy

Describe your vision for the community in 2-3 sentences:  
Our vision for community of Bemidji's local foods future is: \_\_\_\_\_

Identify 3-5 goals that would support the vision you developed

Napoleon, ND; Spearfish, SD; Bemidji, MN

## slide 13

### 6 Draw 3 creative solution ideas

(5 min)



Design Thinking Workshop: For a Local and Sustainable Foods Future

Napoleon, ND; Spearfish, SD; Bemidji, MN



Design Thinking Workshop: For a Local and Sustainable Foods Future

### Refining and Implementation (30 min)

Translating your vision into action steps:

Where do we want to be in 2 years? (15 min)  
What steps do we need to take – this week, next month, in six months and one year to get there? (15 min)

Napoleon, ND; Spearfish, SD; Bemidji, MN

## slide 14

### 7 Share solutions and capture feedback

(8 minutes, 4 minutes each)



Design Thinking Workshop: For a Local and Sustainable Foods Future

Napoleon, ND; Spearfish, SD; Bemidji, MN



Design Thinking Workshop: For a Local and Sustainable Foods Future

### Reporting back and wrap up

(15 min)

Napoleon, ND; Spearfish, SD; Bemidji, MN

## slide 15

### 8 Build solutions

(7 min)



Design Thinking Workshop: For a Local and Sustainable Foods Future

Napoleon, ND; Spearfish, SD; Bemidji, MN



# background

## NAPOLEON, ND

Napoleon, ND Community Profile

	Logan County, ND			Napoleon, ND		
	2010	2000	% Change	2010	2000	% Change
Population	1990	2308	-13.8	792	857	-7.6
Housing Units	1144	1193	-4.1	401	420	-4.5
Females %	49.1	49.6	-1.0	51.8	52.4	-1.1
Males %	50.9	50.4	1.0	48.2	47.6	1.3
Median Age	49.8	46	3.8	48.9	50.2	-1.3
Age Under 18	21.1	22.6	-1.5	23.4	22.1	1.3
Age 18-24	4.5	3.6	0.9	4.3	3.7	0.6
Age 25-44	16.9	21.8	-4.9	17.6	18.7	-1.1
Age 45-64	29.5	25	4.5	22.5	22.3	0.2
Age 65+	28	27	1.0	32.3	33.3	-1.0
Median household income	\$27,986			\$28,167		
Median family income	\$33,125			\$36,042		
Percent below poverty	15.1			8.8		

- Analysis**
- Logan County and Napoleon both experienced population loss in last 10 years
  - County loss much more drastic (almost 14%) compared to 7.6% in city
  - Napoleon is aging slightly faster; median age increased from 48.9 to 50.2
  - Logan County is getting slightly younger (median age 46 from 49.8)
  - Almost 60 % of Logan County is over 45 and rate of people aged 25 to 44 has dropped by almost 5%
  - Under 18 in both county and city is slightly more than 20%
- (2000)
- Median household incomes in city and county are almost identical (around 28k)
  - Median family incomes were higher in Napoleon than in county
  - Those in Logan County were almost twice as likely to live below poverty 15.1% compared to 8.8%

**Selected Agricultural Statistics: Logan County, ND**

Avg value of sales per farm	\$198,452
Avg net cash income from farm operations	\$88,161
farms with net gains	349
farms with net losses	77
STATE farms with net gains	25174
STATE farms with net losses	6796
Farms 2007	426
Land in farms 2007	577086
Avg size of farm	1355
Avg Est market value of land and bldgs	\$990,035
Avg Est market value of land and bldgs per acre	\$731
Direct Sale 2007 farms	8
Direct Sale 2002 farms	7
Direct Sale 2007 \$1000	19
Direct Sale 2002 \$1000	11
CSA	2
Farms selling value added (data from 2007 unless otherwise noted)	11

**Analysis** Logan County sold products valued at an average of \$198,452. Average cash income from farm operations was more than \$88k – very prosperous ag operations in area

4.5 times as many farms with gains than losses

Figure better than state that had 3.7 gains for every loss

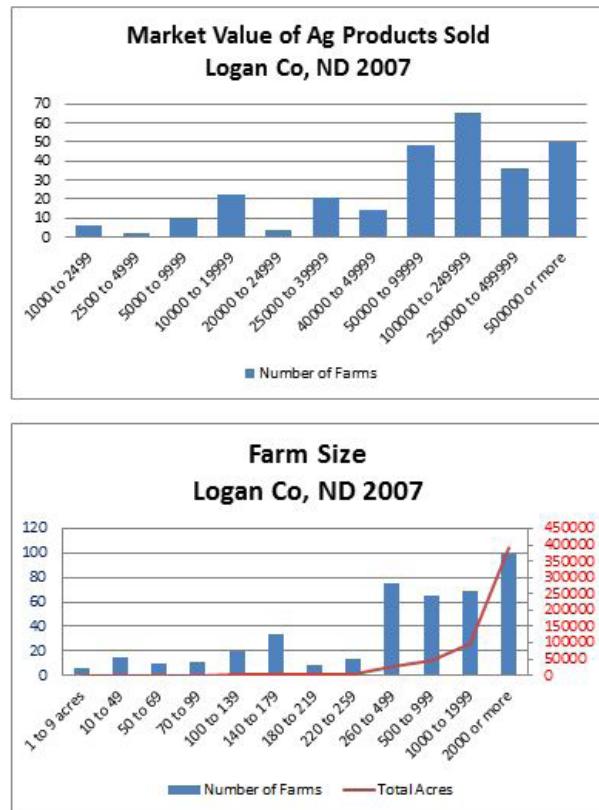
426 farms and more than 577k acres of land in county

Average farm size was 1355 acres and was valued at average of \$731 per acre

8 farms sold directly to consumers up from 7 in 2002.

# background

## NAPOLEON, ND



**Analysis** Farms selling high volume and value products dominate landscape

150 farms sold more than 100k of product

Despite large number of large farms, there were still many farms producing products with less value. 60 farms sold products valued between 10k and 50k

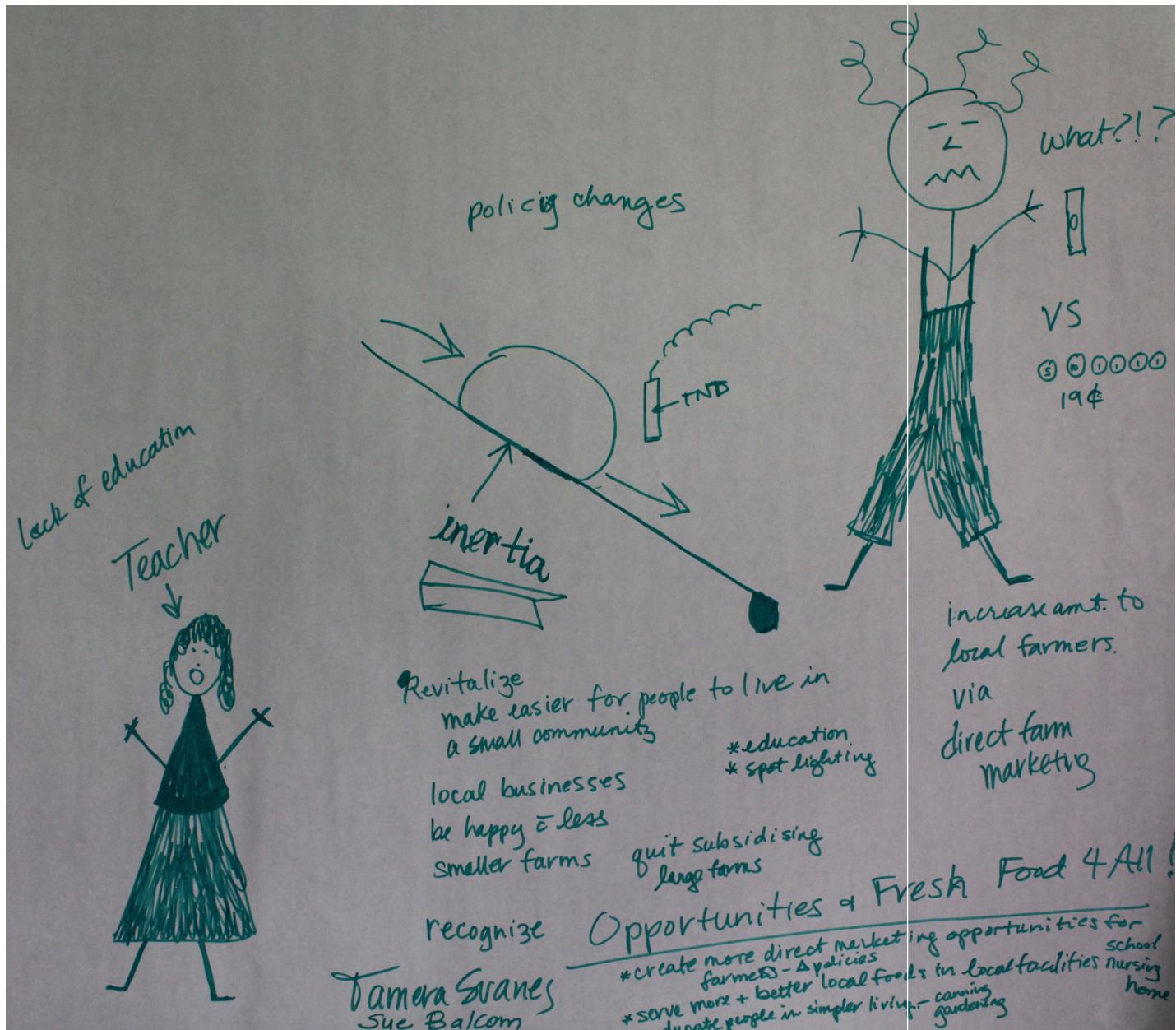
Higher value of ag products sold corresponds with large proportion of very large farms

Large jump in the number of farms that were greater than 260 acres.

Vast majority of farmland in county made up of 100 or so farms with more than 2000 acres each

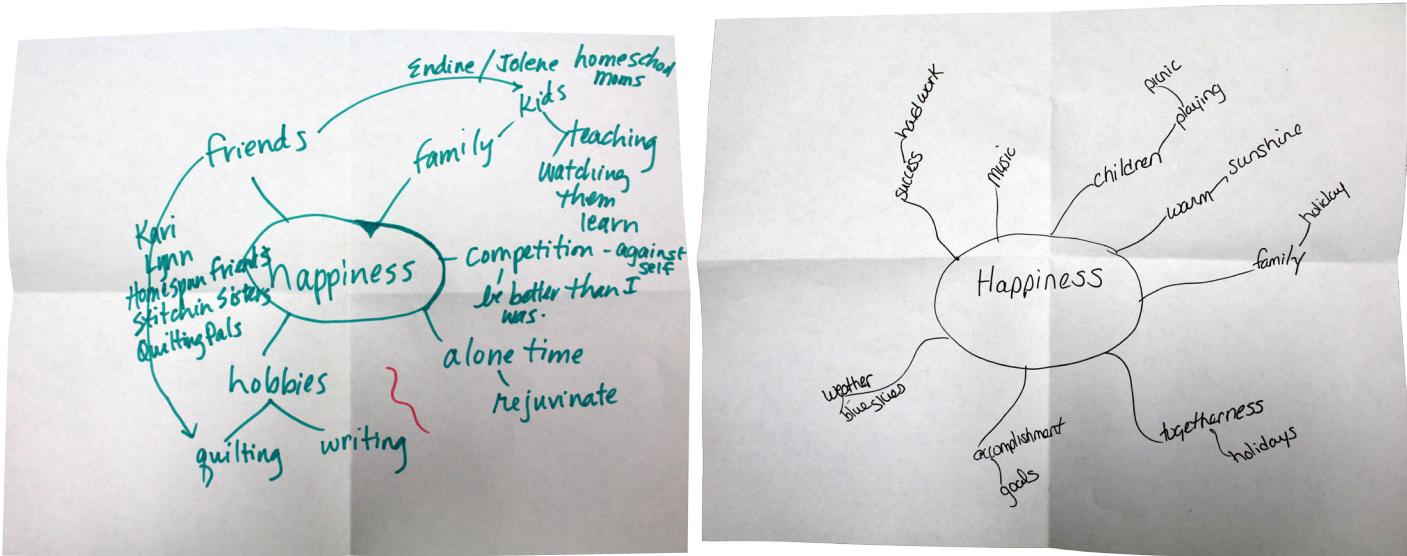
# design thinking workshop

## NAPOLEON, ND



November 17, 2011

# design thinking workshop NAPOLEON, ND



## 5 min MindMapping exercise

The mind-mapping exercise was a way to get participants warmed up to sharing their ideas, but served a purpose of conveying the values of this community as well. Lots of family/children mentions

## 45 min Food Experience: Design Thinking Exercise

### Personal Experience

- Husband who recently died who was the main family cook
- Traveling food experiences
- Thanksgiving (teaching children to cook), family gatherings

### Community Experience

- Marriages
- Potluck
- Social gatherings
- Farmer's market
- Moved here to have a grocery store

## 3 min Capture Findings

**Farmers market, local commerce, income for families, awareness, vendors, shoppers, producing locally, availability, advertising, overcoming obstacles, knowing the producer, fund-raisers, finding consensus,**



**adding value, recognize, revitalize, smaller farms**

3 min Define Problem Statement

Our community needs to pass down cooking skills because it is becoming a lost art.

Our community needs a way to be able to sell locally grown foods (beef, chicken, eggs, veggies, etc) but we need better awareness of who is selling/growing and to remove some barriers to meat processing

Our community needs a way to encourage more local shopping but many people shop in Bismarck for items that can be purchased here, or they shop from the trucks that supply the restaurants or nursing home.

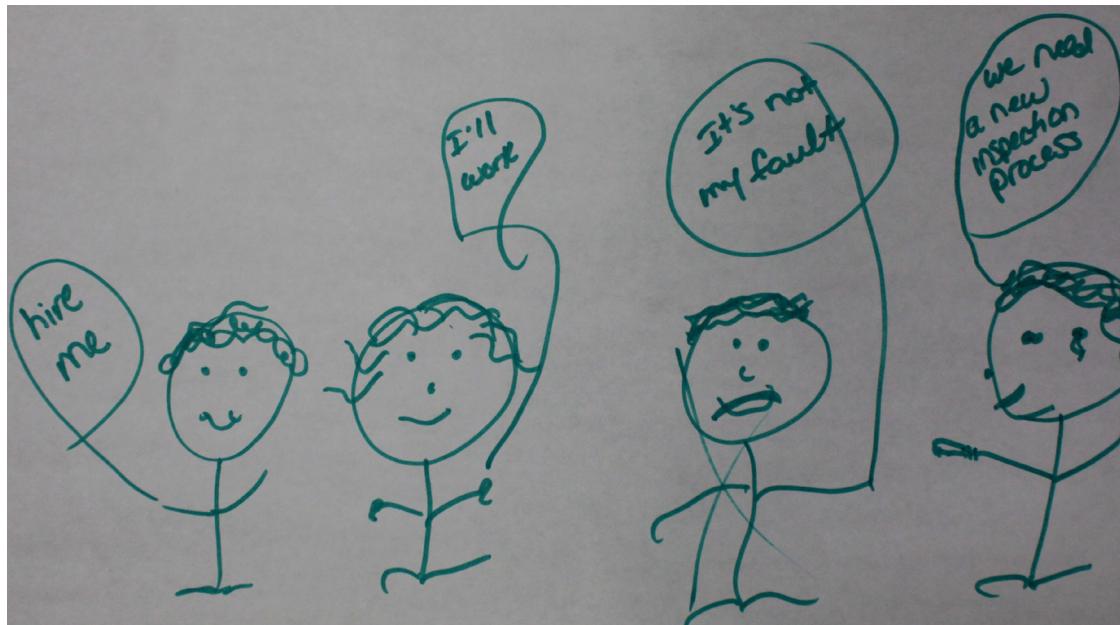
Our community needs more expansion of products carried locally, meetings with business owners and diversity (grocery store and restaurant)

Our community needs to grow business (catering, pizza sales by restaurant) but has inadequate help

Our community needs to petition for change to allow local providers to sell locally but existing policy won't allow it.

Our community needs a way to support farmer's markets but not everyone recognizes the benefits

# design thinking workshop NAPOLEON, ND



Our community needs a way to change policies regarding direct marketing but there's inertia. People need to understand and agree that there is a problem

Our community needs a way to encourage consumption of local foods because it would stimulate local economy and increase health.

5 min Draw 3 creative solution ideas

- More education (teacher)
- Inertia and policy change point out the fact that things need to change
- Poor farmers, more \$ through direct farm marketing
- Petition to the agency making it difficult to get inspections
- Connect seller with growers-education through schools and local events
- Ad campaign to raise awareness about both the negative effects of shopping out of town and the positive effect of keeping dollars local
- Grocery closings
- School greenhouses for kids to grow food
- Sell to people in community to store
- Farmer's bring their goods to town to sell (beef, chicken, pork)
- Working people move to Napoleon, restaurant expands to utilize new kitchen facility, put Pizza Corner out of business!
- Find more employees looking for work

- More communication with inspector
- 

### **30 min Visioning your Local foods future**

What these communities were like in the 70s

What did we learn

There are common goals  
There is room for growth and change  
We are going to need lots of extra help

Has to be a connected network

Our vision for the community of Napoleon's local foods future is a thriving, stable outlet for farmer's market items, local grocery store and local meat processing

#### **GOALS**

Build capacity of Farmer's market  
Raise awareness of the benefits to everyone for more local sales  
Be able to sell local meat products to the restaurants and individuals  
Be able to buy more locally grown foods-known where your food has come from

### **30 min Refining and Implementation**

Greenhouses in schools already exist, could be used for growing food

Need a champion, organized leadership and an action plan

Light processing plants flash-frozen veggies instead of canned ones, using kitchens that already exist in churches, schools

Increase the number of growers for farmer's market

Run newspaper and radio ads regarding buy local benefits to economy  
Arrange for some sort of arbitration or brainstorming meeting between FDA inspector and processing business

Create farm to school chapter

School garden  
Volunteers to help prepare food

Boost local sales, direct sales of meat, poultry, eggs produce

Support farmer's market  
Lobby health dept. to change rules  
Educate people on value of local food (social benefits, health, economic)

# background

## SPEARFISH, SD

Spearfish, SD Community Profile

	Lawrence County, SD			Spearfish, SD		
	2010	2000	% Change	2010	2000	% Change
Population	24097	21802	10.5	10494	8606	21.9
Housing Units	12756	10427	22.3	5045	3904	29.2
Females %	50.5	50.8	-0.6	52.9	53.4	-0.9
Males %	49.4	49.2	0.4	47.1	46.6	1.1
Median Age	41	37.2	3.8	31.1	31.7	-0.6
Age Under 18	19.6	21.3	-1.7	18.6	20.3	-1.7
Age 18-24	13.3	13.7	-0.4	20.2	21.5	-1.3
Age 25-44	21.4	25.4	-4	22.3	23.3	-1
Age 45-64	29.2	23.1	6.1	21.2	17.9	3.3
Age 65+	16.6	14.6	2.0	17.7	17.1	0.6
Median household income	\$31,755			\$26,887		
Median family income	\$40,501			\$40,257		
Percent below poverty	14.8			17.4		

**Analysis** Population of both Lawrence County and Spearfish have had large increases in the last 10 years

Spearfish has grown more than 20%, more than twice growth rate than in county

Subsequent growth in housing units occurred, more than 2000 additional units in the county

Median age in Spearfish about 10 years less than county (31 and 41 respectively)

Both county and city had relative decreases in people under age 44

Greatest relative population increases in the city and county were in age ranges 45 to 64

Might indicate region is popular destination for empty nesters and/or retirees

**(2000)** Both city and county had poverty rates near or above 15%

Median household incomes in county were higher than in city (31775 to 26887)

Median family incomes didn't differ too much (both above 40k)

**Selected Agricultural Statistics: Lawrence County, SD**

Avg value of sales per farm	\$38,605
Avg net cash income from farm operations	\$9,962
farms with net gains	133
farms with net losses	168
STATE farms with net gains	21983
STATE farms with net losses	9186
Farms 2007	301
Land in farms 2007	133503
Land in farms 2002	140703
Avg size of farm	444
Avg Est market value of land and bldgs	\$640,919
Avg Est market value of land and bldgs per acre	\$1,445
Direct Sale 2007 farms	16
Direct Sale 2002 farms	8
Direct Sale 2007 \$1000	213
Direct Sale 2002 \$1000	45
CSA	0
Farms selling value added (data from 2007 unless otherwise noted)	14

**Analysis** Average value of agricultural sales per farm were almost \$40k, average net cash incomes were under 10k on average

Slightly more farms with net losses than net gains

This is drastically lower than in state as whole where there were 2.4 farms with gains for every farm with loss

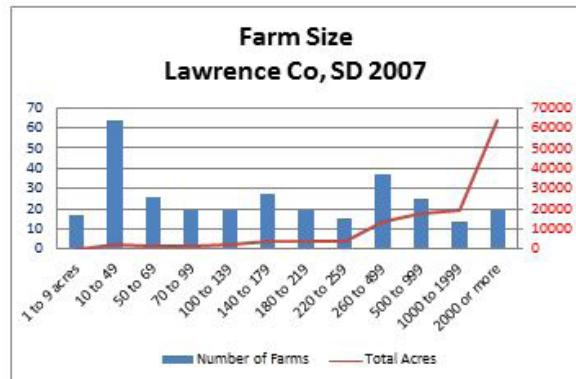
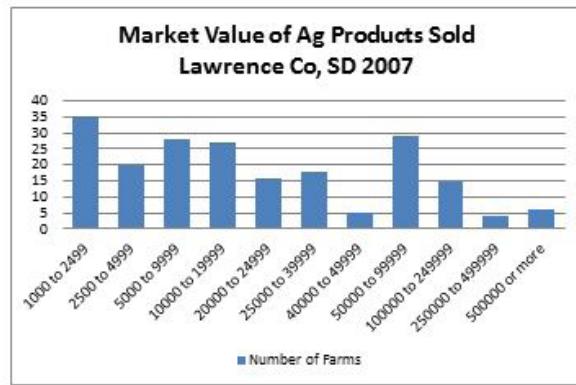
Increasing population may have taken toll on land in farms, county lost 7200 acres between 2002 and 2007

Estimated average value of farms (land and buildings) was \$640k average \$1445 per acre

Only 16 farms participated in direct sales in 2007 but this number had doubled from 8 in 2002

Total direct sales amounts increased 5 fold to \$213k

# background **SPEARFISH, SD**



**Analysis** Majority of farms had sales less than \$40k

Greatest number of farms were between \$1000 and \$2499

More than 50 farms between \$5000 and \$20,000.

Fewer farms with higher sales volumes until \$50,000 to \$99,999 level

Indicates that there is a split between low earning and high earning farms

Also a split in farm sizes. Large number of farms between 10 and 49 acres and large number between 260 to 4999 acres

Although less than 20 farms make up more than 2000 acres, this makes up the largest number of actual farm acres in county

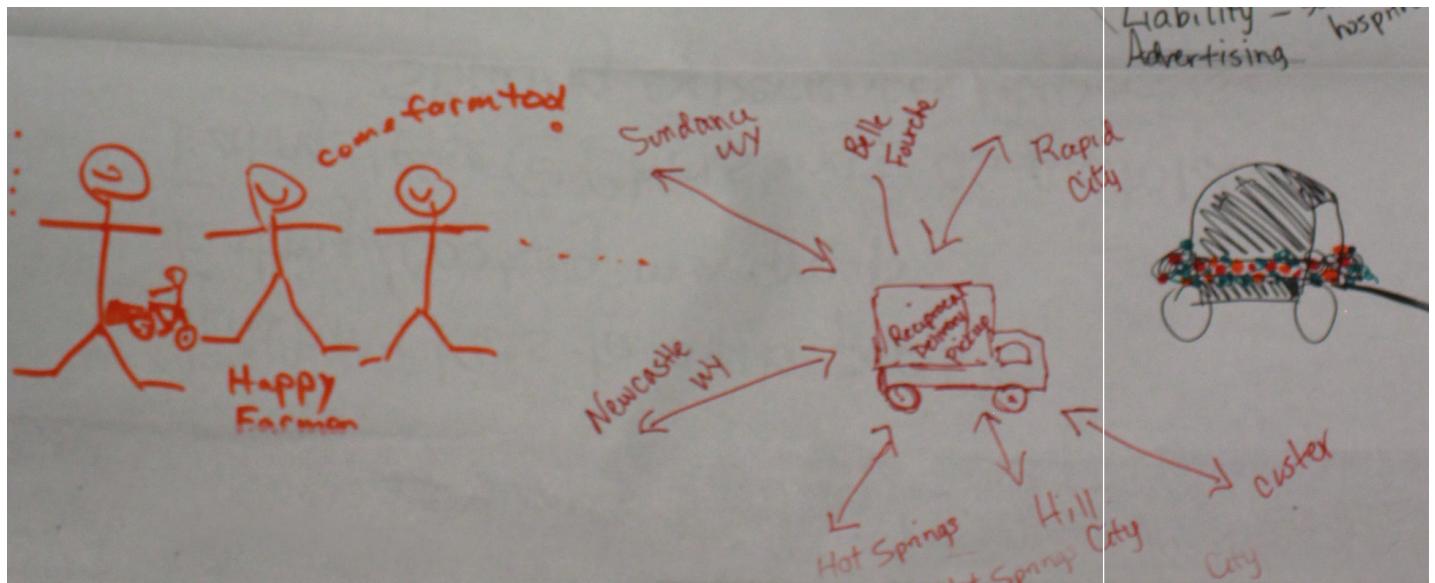
Large farms make up the majority of land, but small to mid-sized farms are the majority in number

# design thinking workshop

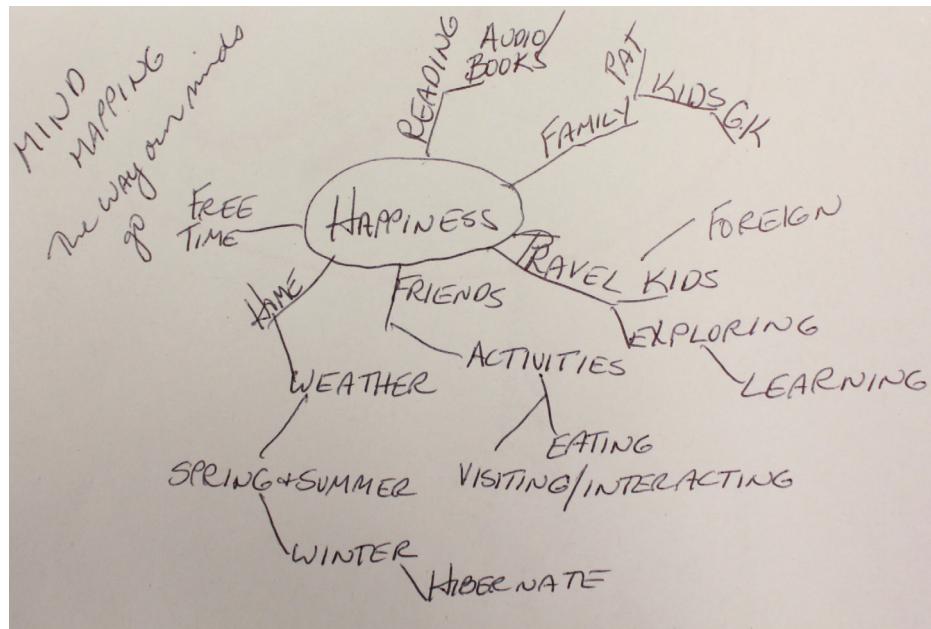
## SPEARFISH, SD



Our vision is for everyone to participate & understand  
in the philosophy /need / Long term advantage to buying & eating



# design thinking workshop **SPEARFISH, SD**



## 5 min MindMapping exercise

The mind-mapping exercise was a way to get participants warmed up to sharing their ideas, but served a purpose of conveying the values of this community as well.

## 45 min Food Experience: Design Thinking Exercise

### Personal Experience

Sharing a meaningful personal food experience further emphasized the importance of cooking with family and teaching traditions of food. Participants shared experiences of cooking and eating in groups, eating lefse on Christmas as a child, sharing experience and expertise preparing food with their children.

Teaching kids to make pickles

Eating/cooking in a group

Eating lefse@Christmas as a child, sharing experiences and expertise

Going to festival in the park and sharing food

Eating alone occasionally- eating whatever you want

Big Italian large group slow meals

Growing own organic foods

Grandma's cooking (making fresh kuchen, homemade Kasse Nifle

Growing a garden as a kid or as a parent (family time and learning)



### Community Experience

When asked to share a community food experience that has had a lasting impact on them, many specific examples of community events came up: Community Chili fund-raisers, Ice cream socials, community fish feed, chicken butchering. Examples of preparing food in groups included catering experiences with some local items such as pigs and bread, cooking for themselves at Boy's Club, Meals on Wheels experiences working in shelter kitchens. In addition, a few examples of local food infrastructure that already exists came up, with participants sharing their experiences at farmer's markets making more real connections with their food, a facility called Pete's Kitchen which offers cooking classes downtown.

Catering experiences – some local foods (pigs, bread)

Community Chili fund-raisers

Farmer's markets, making connections to food

Starting a community farmer's market (Black Hills Milk, Good Earth)

Food/cooking at Boy's club (made all food from scratch)

Pete's kitchen (Downtown cooking classes)

Animal/Mineral/Vegetable, Barbara Kignsoler

Chicken butchering

Ethnic foods/cooking, demonstration and education

Meals on Wheels, shelter kitchens

Community fish feed

Ice cream social

# design thinking workshop **SPEARFISH, SD**



3 min Capture Findings

**Grow, Harvest, Eat, Transport, Sell, Learn/  
Educate/Teach, Share/Market, Provide space,  
Desire, Communicate, Network, Promote,  
Educate, Transport, Tracking, Label, Inspecting,  
Liability, Advertising, Healthy, Distribution**

3 min Define Problem Statement

Our community needs a way to convince people to see the opportunities of buying local. Surprisingly, many poor people in town who lack access to wholesome food need to improve access and ability to use (time, etc).

Our community needs a method to remove barriers to transportation, tracking, labeling, inspecting and liability issues.

Our community needs a way to communicate among producers and consumers a way of offering information re: the accessibility and needs for local food production

Our community needs to educate people, especially youth, the importance and benefits of eating healthier while supporting local foods.

Our community needs a way of producing and making local foods affordable and assessable for all community members (low income)

Our community needs a way to increase available local foods. Because demand is increasing, horticulture assets are available, past history shows local food production is possible.

Barriers: Cost, knowledge, specific desires  
Strengths: Available producers, educators

**5 min** Draw 3 creative solution ideas

- Incentives, gift cards
- People linked can get a lot more done
- Raised beds at nursing homes, bringing local foods to all levels of the community
- Transportation issues, refrigerated trucks currently come back empty, they can be bringing something back from our community to be distributed
- Cooperatives, online ordering system
- Farmers markets get overflow from growers sourcing to cooperatives
- Involving college-level student classes and organizations to gardening
- Have a garden coordinator or teacher
- Utilizing black hills land

**30 min Visioning your Local foods future**

Educate community/school/kids to be activists (stand up for rights)

Market people diversified, growing specialty items

Educate, test soil, grow appropriate to soil-climate conditions

Bakers, crafters, skills brought to the table, examples (knife sharpener)

Seed sellers-educate/heirloom produce after parent plant, etc

Our vision is for everyone to participate and understand in the philosophy/need/long term advantage to buying and eating local foods

Everyone will have access to and choose to use local foods with economically sound benefits to producers and improved health of the local population.

Our vision of the future is to sustain a system/network for producers and consumers to participate in a local economy of foods, through education by cooperation partnerships, cooperatives, community groups and the city of Spearfish

Our vision is that

Spearfish provides local foods in BHSU, public schools and hospital and nursing homes

Community gardens increase to two or more locations

Farmer's Market has core attendees of 10 farmers with 1,000 customers/week

Spearfish enters tier 3 in the food system with community based food system

#### GOALS

Create a community-wide, multifaceted network (volunteers, producers, consumers, businesses, health providers)

Have a strong local food presence in the school system

It takes a village

**30 min Refining and Implementation**

If we can find a way to bring kids in the parents will come too

Start growing personal gardens

Partner with local business's to connect with farms

'Dakota Rural Action'

# background

## BEMIDJI, MN

Bemidji, MN Community Profile

	Beltrami County, MN			Bemidji, MN		
	2010	2000	% Change	2010	2000	% Change
Population	44442	39650	12.1	13431	11917	12.7
Housing Units	20527	16989	20.8	5748	4948	16.2
Females %	50.1	50.7	-1.2	52.3	53.5	-2.2
Males %	49.9	49.3	1.2	47.7	46.5	2.6
Median Age	33.2	31.5	1.7	27.1	27.6	-0.5
Age Under 18	25	28.7	-3.7	19.4	21.2	-1.8
Age 18-24	14.6	13.9	0.7	26.7	24.9	1.8
Age 25-44	22.3	25.2	-2.9	21.6	23	-1.4
Age 45-64	25.1	20.5	4.6	17.6	15.4	2.2
Age 65+	12.9	11.7	1.2	14.8	15.6	-0.8
Median household income	\$33,392		\$28,072			
Median family income	\$40,345		\$37,250			
Percent below poverty	17.6		19.2			

### Analysis

Population in both Bemidji and Beltrami County gained more than 12%

County population gained 12% but number of housing units gained more than 20%

Bemidji had 16% increase in housing units

Population in county older than in Bemidji with median populations 33.2 and 27.1 respectively

Proportion of residents in city and county under 18 declined but young adults in city and county increased slightly

Relative number of 25 to 44 year old decreased more drastically in county than city

Both city and county experiencing increase in ages 45 to 64. Proportion of county population in this group up by more than 4.5%

Median household and family income in county higher than in city

Households in county earned on average more than \$5000 per year than those in city.

Family income was more than \$3000 more in county

Poverty rate in Bemidji was 20% compared to 17.6% in county.

**Selected Agricultural Statistics: Beltrami County, MN**

Avg value of sales per farm	\$31,116
Avg net cash income from farm operations	\$9,872
farms with net gains	271
farms with net losses	403
STATE farms with net gains	50508
STATE farms with net losses	30484
Farms 2007	674
Land in farms 2007	210833
Land in farms 2002	232735
Avg size of farm	313
Avg Est market value of land and bldgs	\$486,069
Avg Est market value of land and bldgs per acre	\$1,554
Direct Sale 2007 farms	44
Direct Sale 2002 farms	28
Direct Sale 2007 \$1000	152
Direct Sale 2002 \$1000	33
CSA Farms selling value added	3

(data from 2007 unless otherwise noted)

**Analysis** Average value of ag products sold was over \$31K per farm while average net cash income was under \$10k per farm

Number of farms with net losses higher than the number of farms with net gains by rate of .67 to 1

Minnesota farms with gains exceed those with losses (1.66 gains to every 1 loss)

Population gains may have led to loss in farm land.

Between 2002 and 2007 county lost 22,000 acres

Estimated value of farm (land and bldgs.) more than \$486k, averaged at \$1554 per acre

Number of farms selling directly to consumers up to 44 in 2007 from 28 in 2002

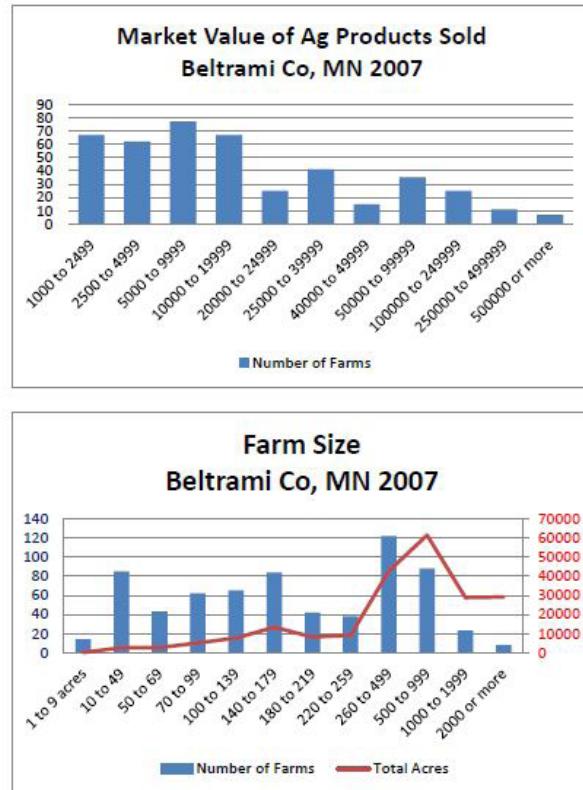
Total sales of products sold directly increased 5 fold from \$33k (2002) to \$152k (2007)

3 reported CSA farms

29 farms reporting value added sales.

# background

## BEMIDJI, MN



**Analysis** Most farms in county selling goods with total value under \$20k

Slight increasing trend in farms selling products bet \$50k and \$100k but this trend declines as fewer farms are selling in higher value ranges.

Despite low value of ag product sold there are large number of farms between 260 and 1000 acres.

These farms make up the majority of farmland in the county

There are also more than 80 farms that are between 10 and 49 acres and an equally large number of farms between 140 and 179 acres

Very large farms are rare in the county

There is a good distribution in the number of farms across a variety of sizes, small to medium-large

# design thinking workshop

## BEMIDJI, MN

Three Sister Corner Garden  
- Home Gardening  
Family - Good Foods  
for kids/ G. kids  
new foods for babies  
Eating Right for Health  
- community

LOCAL FOOD SHELF

NUTRITION ED.

Elder Network - contribute;  
historical foods  
10 folks from community  
Revival of knowledge. Practice  
Film Project / Share

Spending time w/ Grandmom  
Gathering, baking, preserving  
friends from CSA, canning  
together Community

Community

Community Garden  
344 yr old structure  
Open minded - unafraid, not perfect

Our Community needs a way to  
Recognize value of Local Foods

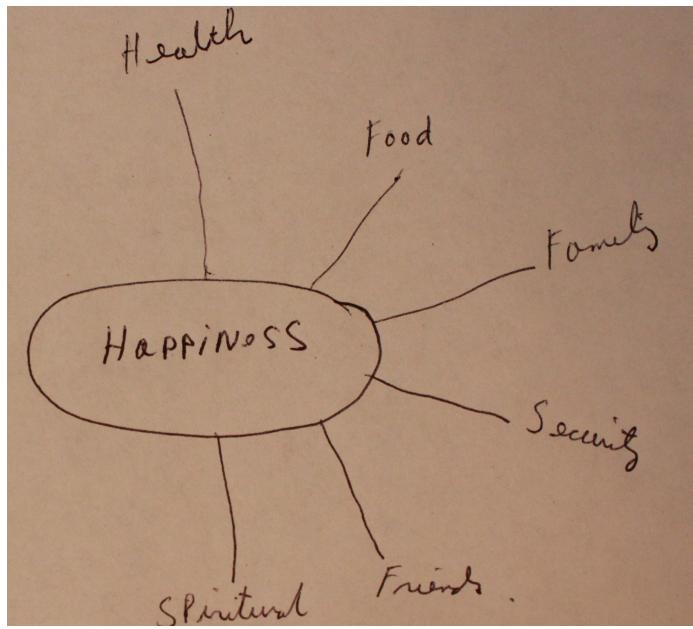
(the main cost of GM's, pesticides etc.) (Community's need:)

Heal a Life together - members (Recognize value of CSA's)

Because/ However/but ... Expensive/not convenient/time  
needs to look at real cost on health , appreciate the benefits

method, food Connection - quality time & family & can be  
Direct Marketed

# design thinking workshop BEMIDJI, MN



## 5 min MindMapping exercise

Contentment, peace, home, projects finished, food security, grand kids, holidays, food, focused on people, others needs, family, sun, vacation, communication, honesty, elements: dirt, water, sun, air, joy of being a woman, stretching, health, food, relaxation, hobbies, shared values

## 45 min Food Experience: Design Thinking Exercise

### Personal Experience

Farmer's market, produce, baking, raising chickens, pigs.

Teaching kids where foods come from.

Trying food from different cultures: experience tastes, cooking methods, sensations. Food is a window into culture.

### Gardening/ Farming

Family aspect: learning where food comes from, a greater respect for food

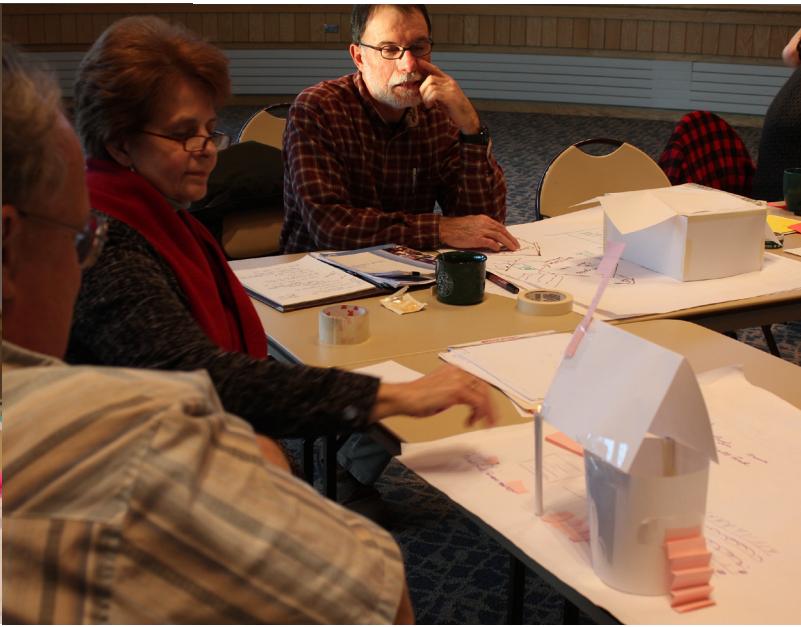
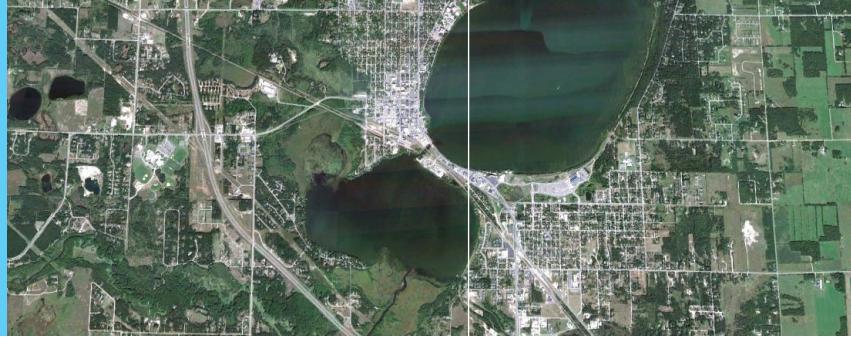
Work of raising livestock, a greater respect of living creatures

Cooking with grandma (honor teaching traditions), women gathering in kitchen, food traditions- lefsa, and late night cooking with brother. I like to cook... what can I say? Now, getting my grandson to try new food.

Favorite meal is when the table is full of food that we have grown. Picking berries, specifically high bush cranberries under a blue sky. Making preserves and jams.

Family recreation revolves around food hunting, gardening and berry picking.

Took food to food shelf. Didn't realize how much food people bring in- hundreds of squash, tomatoes, carrots. We grow so much more than what we use, get a lot out of bringing it to food shelf. Aim to get more local foods- dried beans- to food shelf.



Found St. Hillair suppliers of beans. Impressed with how much food people grow + how much they give away.

Grandmother lived next door. She taught me how to garden. She had severe arthritis. So she scooted along on her butt. Nothing prevented her from gardening. That's what got me hooked on gardening.

Started my first garden after my first child. Didn't know what I was doing. Became lifelong gardener because amazed how much food can get from packet seed. In Canada, if no landscaping, practice planted potatoes in whole yard. Nicest potatoes. The wonder. Need to have gardens.

Grandchildren's food experiences from beginning is whole foods- not processed foods

Daughters asked to have foods made for thanksgiving that grandmother used to make- made dishes- adapted the recipes to meet the "dietary" needs of next generation

Friends changed their health by changing lifestyle- whole grains, produce, etc. Changed their life by "common sense" eating.

Spending time with grand mom gathering, baking, preserving friends from CSA, canning together builds community.

Keeping Bees, amazed at what bees do: flowers + rainwater + sunlight = lovely beautiful sweet honey; pollinators; earth communicating with itself; use wax – no waste – to respect work of bees

Wild ricing, looking for teacher-selfless, grateful for help, used duct tape for wrists, purchased a rice license, I was happy even the worms and spiders, grateful, grateful, grateful ... I'm determined to respect for tradition.

Home gardening with three sisters, good foods for kids and grandkids, new foods

November 29, 2011

# design thinking workshop **BEMIDJI, MN**

for babies, eating right for health

## Community Experience

Farmer's Market builds community

Community Gardens/ School Gardens

Increase use of high tunnel – extends growing season, so local foods are available longer in the year.

Community – social aspects

Farmers Market and CSA visiting with people, serve soup kitchen, school lunch, caring for the land. Learning from others, tune in to seasons, stewardship- care respect.

Church dinners and socials help build relationships, fund raiser for the 6th grade class (it had novices and well experienced people cooking together)

Local food shelf nutrition education, elder network – contribute: his, historical foods, 10 folks from community revival of knowledge, practice, film project share

Communicate local foods however culturally diverse, geographically challenged, lower population than metro area.

Community gardens 384 years of experience, excitement, open minded-unafraid, not perfection

Creation of HFSC, concept of community kitchen, expansion of harmony coop, relationship building, capacity building, growth association, Farm to school, local foods feasts, cultural connections, community gardens

## Capture Findings

**Farmers market, farmers school program, community kitchen, economic livestock processing, educational centers, sustainability, caring for the land purchasing wise, food justice center, distribution center, local food feasts, cultural connections, community gardens, creation of HFSC, relationship building, capacity building, growers association**

## 5min Define Problem Statement

Our community needs a way to honor food traditions (Seasons, native berries, hunting, fishing) because our rootedness in place, in family and in community rest on these traditions

Our community needs a way to teach and learn together: multiple venues, Rail River Folk School , school gardens, extension, giving community, generous community, cooking class, change at the core

Our community needs a way to recognize value of growing and cooking food but too often seen as waste of time, or it seems like a chore to avoid rather than an art to love, enjoy.

Our community needs a way to provide access to good food choices for everyone for health, for wholeness.

Our community needs a way to sell food in the traditional market because that's where everyone goes.

Our community needs more accessible markets for smaller, local growers although farmers rarely complain about not getting rid of product

Our community could use more locally produced, value added product because that would provide a second market to increase profits

Our community needs processing facilities so farmers can access institutional markets

Our community needs a mix of market types to fill holes and increase market options for producers because one type of system is like a mono crop.

We need infrastructure because California has it all right now.

Our community needs a way to recognize value of local foods, recognize harms and cost of GMO's, pesticides, heal and live together, realize value of CSAs because real value to health, appreciate the bartering method, quality time and family.

Our community needs a way to provide instruction on how to produce their own food (gardening, hunting, fishing, farming) but the challenges include lack of mentorship/ Access to land/ Access to tools and equipment/ Cost

More local production at larger scale, more variety, better use of natural local foods, but challenges include Cost/ Knowledge/ Experience/ Climate/ Big Business/ Lack of support

Greater access to food, more channels of distribution and more business using but Big Business/ Cost/ Lack of Production are challenges to overcome

Instruction on preserving and using local foods (cooking and canning) because Mentorship matters

Encourage local business exchange (local currency) because People and Business benefit.

5 min Draw 3 creative solution ideas: images/ text

- School Garden to School Lunch
- Family Garden/ Community Garden
- Harmony Community Kitchen
- Learn Make Sell
- Community Food Shelf
- Farmer's market
- Churches United community garden

# design thinking workshop

## BEMIDJI, MN

- Big Box, Small Stores, Homes- Cooperation of all food vendors
- Visibility- Local food/ Farmer's Market
- Community gardens to expose kids to hands on experience
- School Gardens
- Seniors to be mentors to share knowledge with younger generation

### 30min Visioning your Local foods future

Our vision for Bemidji's Local Foods Future is a self-renewing model of food production and distribution that provides access to all, reflects the values of our diverse cultures and creates healing throughout the community and region.

#### GOALS

Community Kitchen at harmony

501 C3 status for Rail River Folk School

Strengthened Headwaters Food Sovereignty Council

Garden space at low income housing

Our vision for community of Bemidji's local foods future is making them affordable, convenient and sustainable through interconnected movements that emphasize our shared resources, sense of community and glamorously market the enrichment that is available to all.

Through these goals:

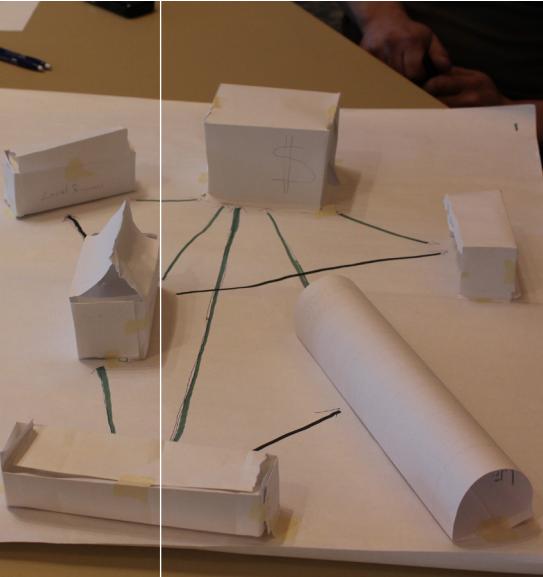
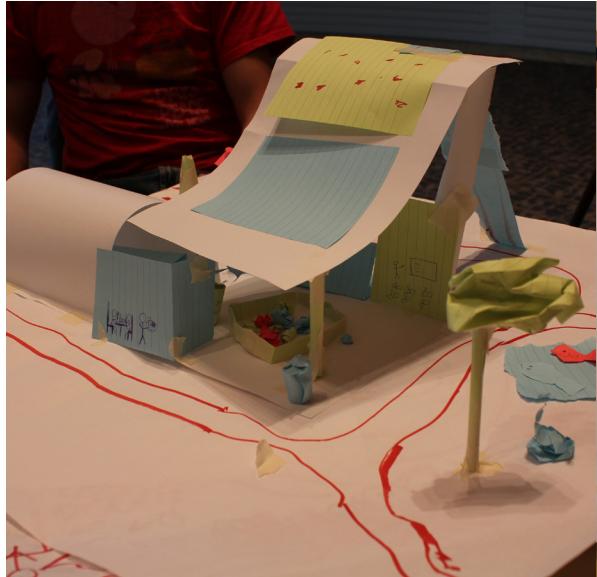
Increase the number of stakeholders and beneficiaries (inclusivity and diversity)

Networking with those outside of circle and those in power

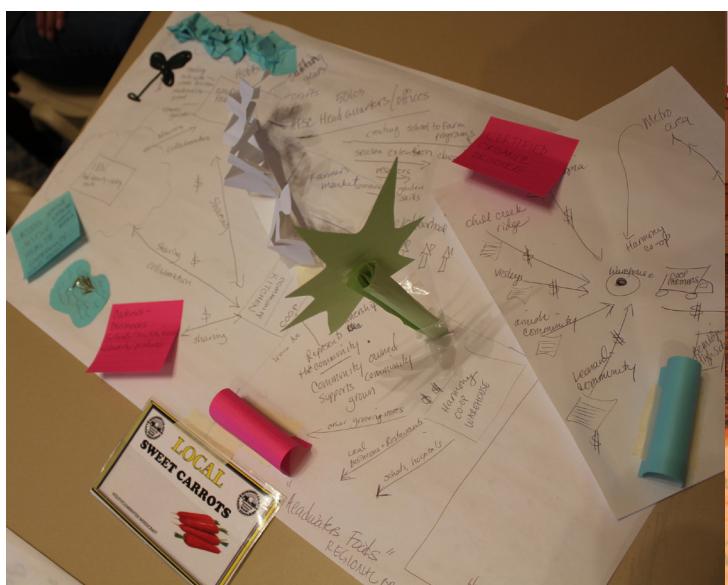
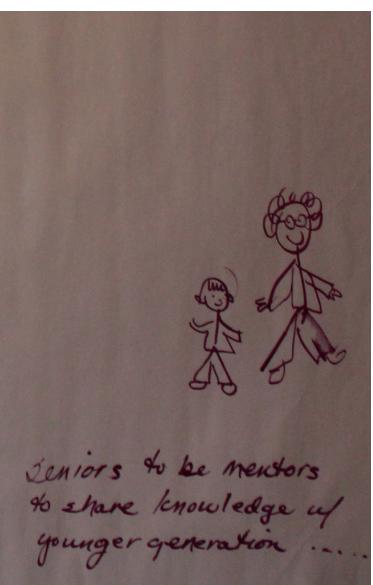
Public that directly and continually support this.

Building physical shared structure downtown.





## Building Models



# design thinking workshop

## BEMIDJI, MN

Cooperative development/ shared expenses, tools, etc.

Everyone experience values eating healthy, local foods- enjoying physical health, and living on healthy landscape. Care of air, soil, water. Social conscience, shared wealth.

Involve schools, day care, families to create opportunities for kids to grow up in healthy food environment

Gain support from city and Joint Planning Board for community space

Promoting "Buy Local", farmers and businesses to circulate money in community

Needs a campaign to raise awareness and shift behavior

Put together planning team to build out prototypes

Gardens for all- more people grow their own food.

Backyard food (chicken, rabbits, bees)

Self-sufficient food center to include: farmers market, farmers school program, commercial kitchen, building a grower's base ( gardens, livestock), economic livestock processing, educational center/ sustainability/ Purchasing Wise- product knowledge where it originated, food justice center, distribution center/ economics to scale, expand to regional foods and even the state do all sustainably.

Create systems that are economically viable, securing support from community, local government, schools, etc.

Cooperation with all food vendors, Visibility of local food/ farmer's market, community gardens to expose kids to hands on school garden, seniors to be mentors to share knowledge with younger generation.

Our vision for community of Bemidji's Local Foods future is creating a sustainable, expanded network that supplies Bemidji with as much food as seasonally possible regionally.

Increasing awareness and support for local foods. (Individual and Business/ Restaurants)

Increasing production (Amount and extended growing season/ high tunnels)

Improving Infrastructure (Aggregation, processing)

Network support to lower costs (Group purchase and grants)

Local Currency

Many more people grow own food

More people grow food for market

Local supply meets local demand (includes food shelf)

Work with city to create community gardens

Work with city to find adequate food shelf, facility (with partners)

Work to build demand for local food – educate!



# PROPOSED MODULES

**The following is a draft list for proposed modules for Napoleon, Spearfish and Bemidji. They were evolved by the core group from the information generated in the Design Thinking workshops and are a starting point for the work ahead and are expected to evolve and change in response to detailed considerations.**

- |  |   |
|--|---|
| <b>Local Food 101</b>  | Will cover the basics and provide background information needed for those interested in learning about the local food movement. Topics might include: what is a foodshed; definitions of local food; health, economic, and social benefits of local food.   |
| <b>Local Food 202</b>  | What do you need to know to promote a healthy local food system in your community? How to do a marketing study and feasibility analysis, how to remove some risk for farmers looking to dedicate a portion of their farm to grow for local market, what are rules for selling home-canned foods, how to access an underutilized licensed kitchen in your community, how to promote and support your local businesses and economy. |
| <b>Local Food Policy 1: Local community policies to enable more local food activity.</b> | What can your community do to support local foods? This session will describe how ordinances and policy can support local food efforts like CSAs, community gardens, and food security.   |
| <b>Local Food Policy 2: County and State policies' impacts on local food</b>             | What are the rules for selling various local products? How can your community advocate to reduce barriers for local food sales and consumption? Addresses issues like identifying the differences between the health and agriculture departments; clarify rules for inspections, certifications, and exemptions; demonstrate how rules are made and how communities can advocate for change.                                      |
| <b>Local Food Policy 3: Community policy to proactively support local foods.</b>         | For communities that are very proactive in supporting local foods. Shows how city governments and planning agencies can support and promote local foods; food policy councils; acknowledgement of local food as local identity; strengthening and supporting local gardening and indigenous foods; 'buy local policies' for governments or institutions; how to bring in other local partners.                                    |
| <b>Cooking with local foods</b>  | Increase consumer demand for local foods by increasing cooking skills and increase familiarity with locally available in-season foods.  |
| <b>Community local capacity resource guide</b>   | What organizations and programs might exist to support local foods in your community? Extension resources, NGOs (like Buy Fresh Buy Local, FARRMS, Dakota Rural Action, or Land Stewardship Project), health care industry, and national USDA   |

<b>Production resources</b>	programs might be able to assist local food ventures. What do you need to be a successful producer for the local marketplace? Cover topics like soils, fertility, production, season extension, high tunnels, master gardeners programs, Extension products and services.
<b>Direct marketing</b>	How to sell your products in farmers' markets, through CSAs, or through other direct marketing venues.
<b>Institutional and retail sales</b>	What you need to know to sell your products to institutions and in wholesale markets like hospitals, schools, local grocery stores, and restaurants.
<b>Food Hubs</b>	What is a food hub and why is it needed? How to provide aggregation, distribution, and storage facilities for local products; creating value added products; food safety and good agricultural practices; various business structures for food hubs; how to capitalize food hubs; marketing and branding.
<b>Making local food affordable</b>	How can local food be affordable for all community members? Covers issues like SNAP for CSAs, farmers markets, and produce from local grocery stores; issues related to getting local food to food shelves and encouraging its use; developing 'seconds markets'; community gardening.
<b>Organizational capacity and structure</b>	How to grow local food programs to flourish and succeed. Addresses leadership and succession training.
<b>Good agricultural practices and safe food handling</b>	How to avoid problems before they start. What you need to know to provide safe products to your customers.

# summary and **RECOMMENDATIONS**

## **Summary**

The design thinking workshops in each of the three communities of Napoleon, ND, Spearfish, SD and Bemidji, MN were each unique due to variables of room setting, number of people present and time available.

The workshops led to the following outcomes. One, they connected participants to each other through creative exercises; two, they helped identify unique histories – individual and collective – of that community around local and sustainable foods; three, they helped clearly state the problems and issues that the community faced; and four, they helped generate innovative and holistic thinking about possible solutions. Finally, they led to the identification of module topics which is the focus of the SARE project.

The verbal sharing exercises led to uncovering of important details of the unique histories and the local context that is very likely to have impact on future planning. (For example, in Napoleon – the possibility of community food sharing activities as a means to promote local foods, importance of engaging youth; in Spearfish – unique local history of farms in town providing to miners in the past; in Bemidji – celebrating of local activities around food including wild rice harvesting, local success of food coop and emerging community kitchen).

The workshop activities, including drawing exercises and models, led to non-verbal insights into critical issues and barriers in their local context. (For example, in Napoleon – issue of inspections, teacher as important figure; in Spearfish – people linked together to have impact; in Bemidji – holistic, integrated vision of facility serving local foods goals).

The problem definitions and vision statements of each community are available to inform SARE's work as well as community process going forward.

## Recommendations based on the Design Thinking Workshops

- 1 The workshops revealed a strong interest by community participants to stay connected and continue action on the topic and expand impact. Keep community members connected through the rest of the SARE process by email lists and encouraging in person meetings at community level.
- 2 Use problem definition and vision statements from the workshops to inform outcome modules but also encourage the community to evolve these statements in participation with community members not present at the workshops.
- 3 Evaluate tools developed in SARE against the problem statements and vision statements from the workshops. How will these tools help the community address their identified problems? How will these tools help them meet their vision?
- 4 Consider integrating design in the final modules developed by the SARE project to achieve impact around local and sustainable foods and design thinking exercises to communicate and disseminate the SARE work.