



2023-2028

WEST CENTRAL MINNESOTA

REGIONAL FOOD PLAN

Becker, Clay, Otter Tail
& Wilkin Counties



Acknowledgements

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Author's Note

First, the Committee that put this report together wishes to recognize our own potential biases in how we view the local food system. Despite the fact that we sought and received input from a variety of food system stakeholders and endeavored to reflect their input in the final document, our own personal experiences and perspectives no doubt shaped the outcome. This is an ongoing process, and as we move forward with plan implementation we will continue to seek and reflect input from those whose experiences differ from our own.

Please note that within this document, unless otherwise specified, the term "West Central Minnesota" shall refer to the four counties within PartnerSHIP 4 Health's service area: Clay, Becker, Otter Tail, and Wilkin.

Executive Summary About West Central Minnesota

Food System Stats

Like the rest of the country, most farms in West Central Minnesota are either “large” or “small,” with not many in the “middle” size category. About one-fourth of farms made over \$100,000 in sales in 2017, while over one-third of farms made less than \$2,500 in sales that year. The most widely planted crops are soybean, corn, wheat, and sugar beets. Cattle and poultry, including turkeys, are the two major types of livestock raised in the region. The total number of farms in the region has steadily decreased in recent years from about 5,800 farms in 2007 to about 4,600 farms in 2017. And less than two-thirds of those farms were profitable in 2017!

Aggregation, processing, and distribution are important, but less well-known, parts of the local food system. These facilities need to be licensed

by either the Minnesota Department of Agriculture or the U.S. Department of Agriculture. The West Central region’s numbers of licensed businesses are summarized in Infographic 1 to the right.

The West Central region continues to increase the number of options for people to get local food. There are six farmers markets in the region² and about 17 school districts that have Farm to School programs.³ While they may or may not sell locally produced products, there are also 240 “brick and mortar” food retailers and 33 mobile food retailers (e.g. food trucks) licensed in the region.⁴

Overall, the food insecurity rate in West Central Minnesota is much lower than the national rate of 11.8%. However, Becker County’s food insecurity rate is a little higher than the other counties, at 8.5%.⁵

² Minnesota Farmers Market Association: <https://www.mfma.org/farmers-markets>

³ U.S. Department of Agriculture, Farm to School Census: <https://farmtoschoolcensus.fns.usda.gov/census-results/states/mn>

⁴ Minnesota Department of Agriculture, Online Licensing System: <https://www2.mda.state.mn.us/webapp/lis/default.jsp?food=y>

⁵ Feeding America, Map the Meal Gap: <https://map.feedingamerica.org/>

Aggregation, processing, and distribution are important parts of the local food system, and are licensed by either the Minnesota Department of Agriculture or the U.S. Department of Agriculture.

WEST CENTRAL REGION BY THE NUMBERS

41 Food Processors & Manufacturers



REGIONAL FOOD PROVIDERS



PRODUCERS BY GENDER IN 4-COUNTY REGION



Infographic 1. Summary of West Central Minnesota Food Systems Statistics, Minnesota Department of Agriculture, Online Licensing System: <https://www2.mda.state.mn.us/webapp/lis/default.jsp?food=y>

Regional Snapshot

There are several geographic and economic factors that make West Central Minnesota unique, including:



A short growing season and strong wind



Varied geography and soils creates huge diversity in production styles, capacity, and conditions



Dominant export crops accordingly result in huge sugar beet production in Red River Valley and more corn and soy the farther east one goes within the region

Some of the cultural factors that make our region unique and might surprise those living outside the region include:

- Huge investments in agricultural technology happen in our region not only from state-wide investors, but on a national and international scale as well. The Fargo-Moorhead metropolitan area is home to a strong entrepreneurship community and in 2023 hosted the largest agricultural technology startup conference in the country.
- Tribal roots and influence are still strong, particularly in Becker County. Various startups and initiatives related to food sovereignty, youth workforce development, clean energy related to food production, and commercial hemp production, are just a few lesser-known gems our region boasts. Tribal communities, unfortunately, continue to be



vastly underfunded and could use more financial support and holistic approaches to poverty and food insecurity/production.

- There is a strong seasonal flow of people both within the region and from across the state. Many wealthier residents own a second home in “Lakes Country” in Becker and Otter Tail counties, which provides for a challenge to sustaining local investment for needed public infrastructure, social services, and more. (These residents often live in the area for three months out of the year.) This also provides a huge opportunity for entrepreneurs because many seasonal residents are well-traveled, have disposable income, and are looking for unique experiences in rural communities that can't be found in big cities or metropolitan areas. Examples are agritourism and ecotourism, which simultaneously celebrate local food production and protect wildlife habitat while providing income for business owners
- Demographic context: Just as in other parts of Greater Minnesota, the towns and cities in the region have an aging population and are starting to see an increase in young families. This is part of a larger migration pattern influenced by the COVID-19 pandemic. The increase in young families and the existing senior population represents a potential target market for local food initiatives.

State, National, and Global Context Influencing our Regional Food System



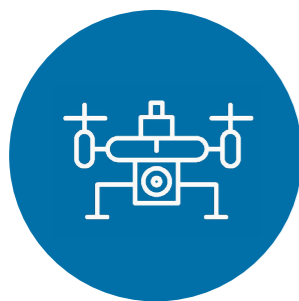
The war in Ukraine has disrupted supplies of grain and fertilizer to parts of Africa. What impact that might have on agriculture in the United States is unknown, but it might raise the cost of specific products.



The COVID 19 pandemic created ripple effects in consumer spending on local foods and the buying experience altogether. A focus on preventative health through consumption of healthy foods has increased demand for both more nutritious local and organic foods. Safety concerns have also made purchasing groceries online and food delivery much more commonplace. The USDA is now working to make SNAP benefits available for online grocery purchases. Touchless payment has also become more common.



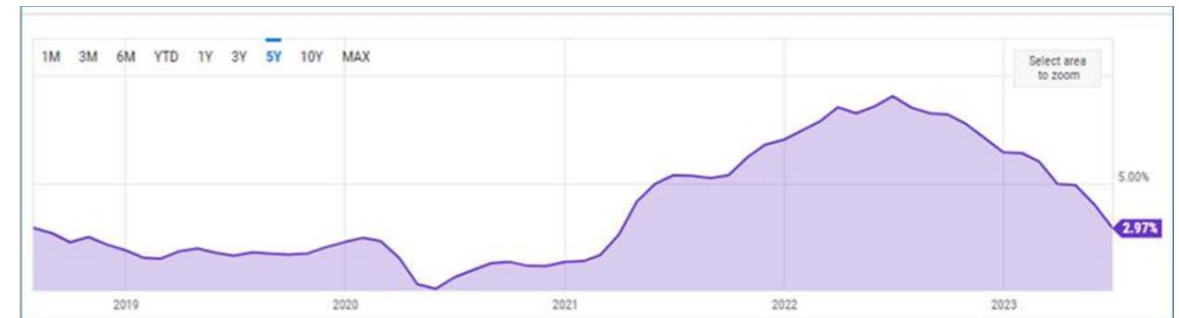
West Central Minnesota's demographics are shifting. West Central Minnesota is ethnically diverse and is projected to increase its ethnic diversity in the coming decades.



Technology is rapidly advancing and disrupting the world of work and the food system as we know it. Examples are drones, artificial intelligence, and block chain technology.

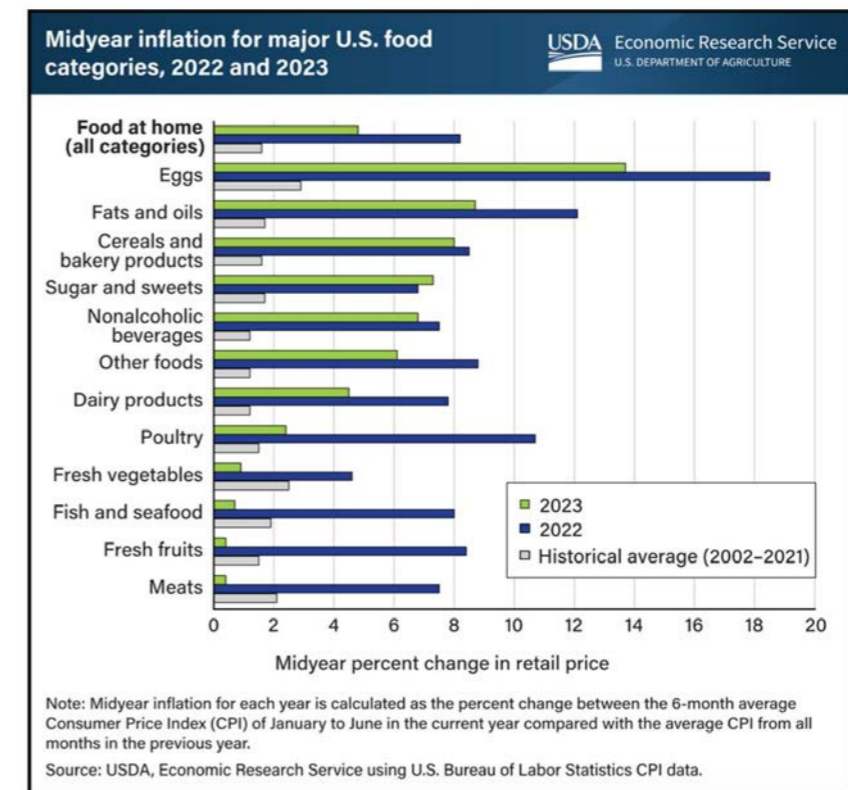


Rising Food Prices. This first graph shows the general US inflation rate from 2019 to 2023, which hit a peak in mid-2022.



Graph 1. U.S. Inflation Rate from 2019-2023

Graph 2 below shows midyear inflation for various food categories in 2022 and 2023. The US inflation rate was 2.97% in June 2023.



Graph 2. Midyear percent change in retail price for major U.S. Food Categories, 2022 and 2023

Graphs above courtesy of Su Ye, economist with the Minnesota Department of Agriculture.

What Is The Food System, and Why Does It Need a Plan?

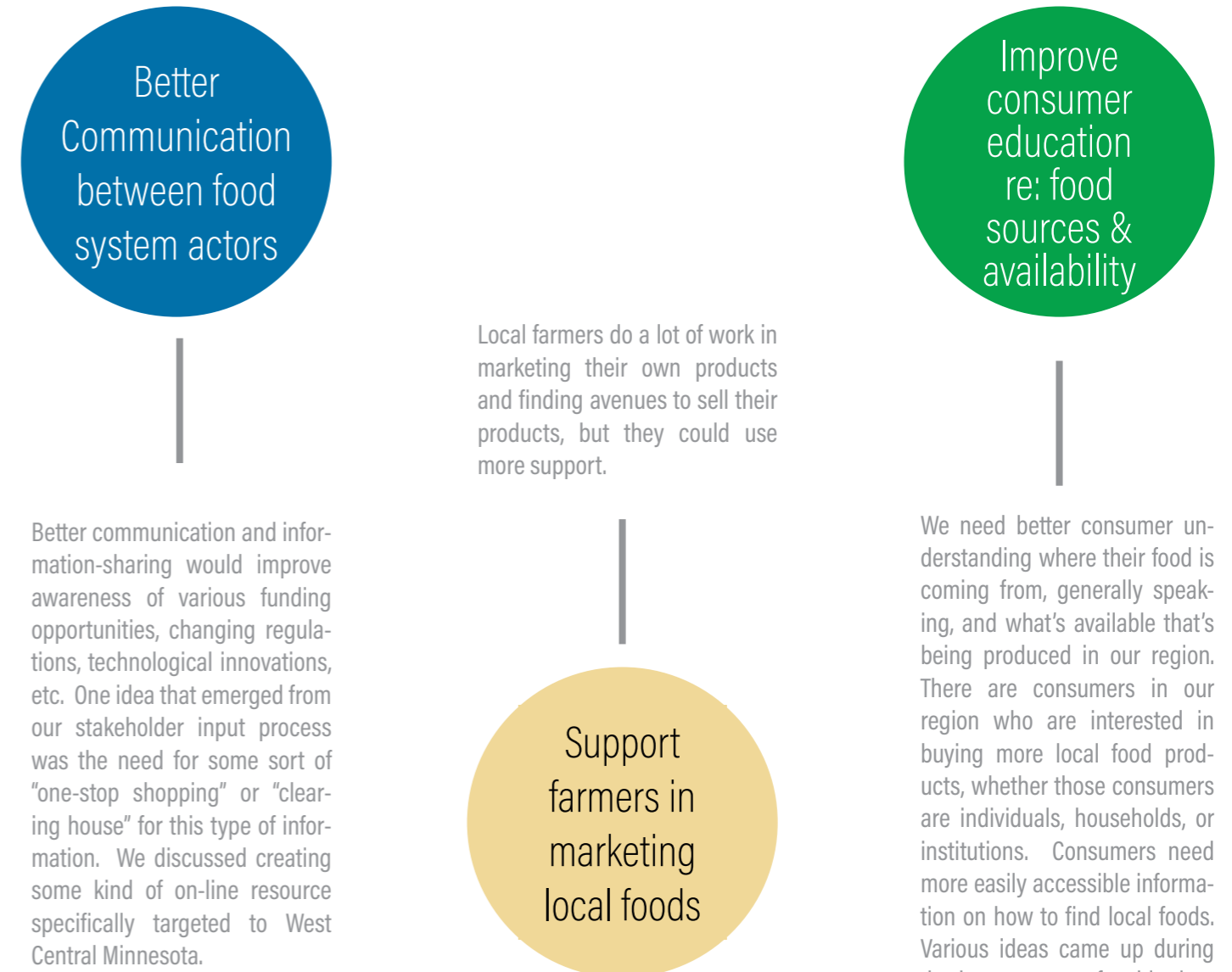
The “food system” is the process food follows as it moves from the farm to your table. This process includes farmers, manufacturers and processors, distributors, retailers, and all residents as consumers. It also includes the inputs and outputs of each step — right down to the food waste we generate. The journey our food takes through the food system is influenced by ecosystems, research, education, funding, our cultures, and our policies.

PartnerSHIP 4 Health is interested in a Regional Food System Plan primarily from the standpoint of health, nutrition, and obesity. We recognize that eating healthy often means eating local, and we want to strengthen the local food system. In addition, PartnerSHIP 4 Health acknowledges other considerations for the regional food system, such as economic development and the environment. PartnerSHIP 4 Health is eager to collaborate with all stakeholders who wish to strengthen our regional food system, regardless of their motivations.



How Can West Central Minnesota Support Priorities as Identified by the Community?

In the creation of this Regional Food System Plan, community stakeholders shared suggestions for strengthening our regional food system. The following list summarizes some common themes. (See Appendices A, B,C, and F for more detailed lists of comments from stakeholders.)



Improve consumer education regarding food waste

During the input process for this document, many people expressed concern about food waste. Several suggested closer coordination with each county's Solid Waste department to help reduce food waste. Clearly more education needs to be done, both in making the public more aware of and sensitive to the issue and promoting alternatives to food waste. The federal government's Food Recovery Hierarchy can be used to help people prioritize where food should go instead of being thrown away. We should work with our local farms and each county's Solid Waste department to help make the public more aware of these options and their benefits.



Provide more support for emerging farmers

The two biggest barriers for emerging farmers tend to be access to land and access to capital. Other barriers include knowledge gaps in areas such as technology, regulations, and finances. Many immigrants in Minnesota farmed in their home country, and some of them would like to resume farming in Minnesota. In addition, immigrants often face additional challenges such as language barriers, cultural differences, and farming in a climate quite different from that of their country of origin. Our region possesses a great opportunity to share information about grants, loans, and technical assistance among emerging farmers who do not come from a farming background.

Expand support for urban agriculture

The City of Moorhead recently amended their ordinance to allow residents to raise chickens on their own property. More changes like this are needed in more cities within our four-county area.



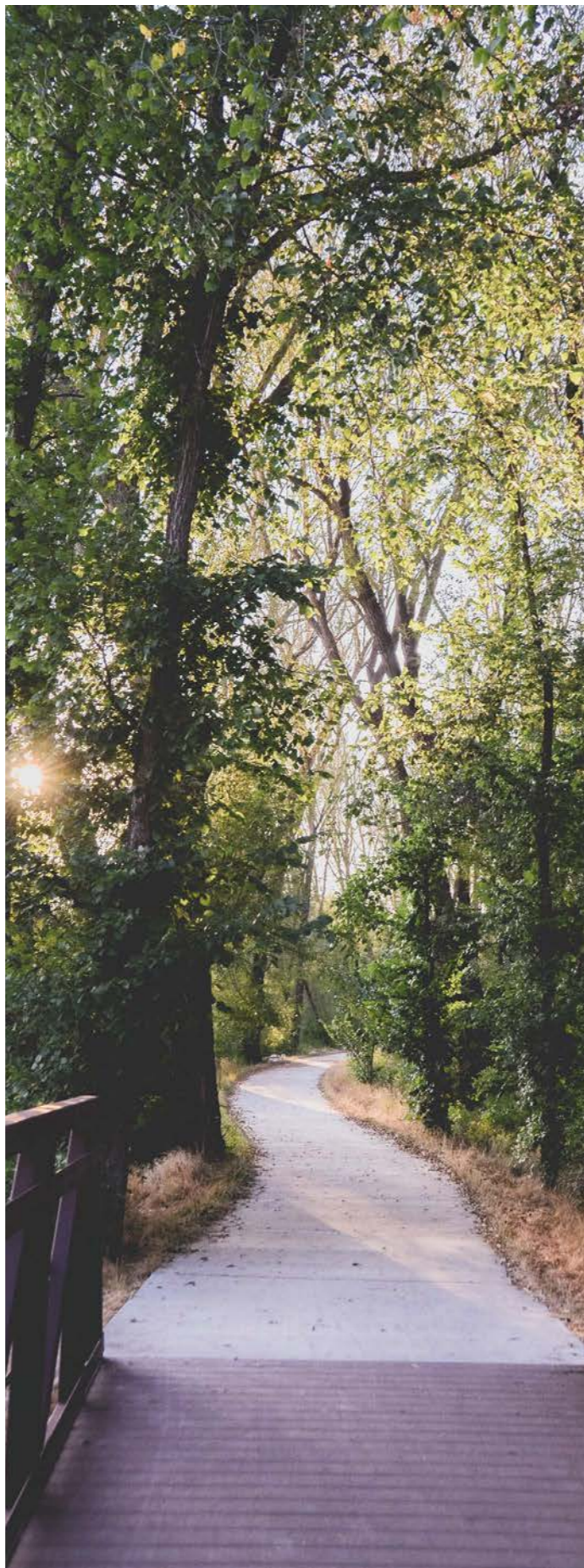
Reduce food insecurity and hunger levels

PartnerSHIP 4 Health has a good working relationship with various food shelves, church organizations, etc. in our region that address hunger and food insecurity. Unfortunately, there are still too many people in our region experiencing these hardships, and we need to continue to seek innovative ways to combat hunger and food insecurity in West Central Minnesota. Greater investment in reducing hunger and food insecurity is needed through preventative measures and holistic interventions.



Making communities more bicycle- and pedestrian-friendly strengthens the local food system through improved access and physical health, which positively reinforce each other. Many of the residents of our region who are at the highest risk of hunger or food insecurity do not own or drive a car. They are dependent on the ability to walk or bike to food destinations. There are many untapped opportunities for collaboration between the transportation and food system stakeholders. PartnerSHIP 4 Health's work over the last 13 years has made communities more bicycle- and pedestrian-friendly. More change in this regard can happen more quickly if those who are interested in multi-modal active transportation and those who are concerned with strengthening the food system form alliances and work together to create change.

Invest in
bicycle- and pe-
destrian-friendly
infrastructure/
interventions



How Was This Plan Created?

This plan was written by a Committee consisting of Patrick Hollister and Jason Bergstrand of PartnerSHIP 4 Health, Emily Reno of Mezclada, Mike Zastoupil of the Minnesota Department of Agriculture, Kate Mudge of West Central Initiative, Annabelle Scafe, Student at the University of Minnesota Morris, and Luke Preussler of CHI Health.

The creation of this plan involved the solicitation and receipt of input from innumerable stakeholders. It began with virtual asset mapping sessions on November 30, December 3, and December 6. During these sessions, people were introduced to the project and asked to share their vision for the region's food system. People then separated into break-out groups based on food system sectors (e.g. Production, Waste and Recovery) and brainstormed assets that the region already has. The sessions finished with the questions "Who else should be here, and how will we get them here?" to help the project team include more diverse voices in the planning process.

In addition, a survey was sent out in the spring/summer of 2023, garnering 476 responses. The survey had 15 questions designed to get more specific feedback from the public on how the West Central region can improve its food system. It was translated into Spanish, Bosnian, Somali, and Kurdish to make participation more accessible. The survey, distribution, and results are in Appendices D-F of this document.

The West Central Regional Food Tour was also used to gather feedback on the plan. The purpose of the tour was to highlight some of the great local food initiatives going on in the region, help people connect and network, and inspire action to improve the region's food system. The three-day tour took place June 23-25, 2023. It featured visits to six different towns in the region, and about 80 people attended in total. More details about the tour can be found in the Appendix.

Goal A Increase Food System Coordination and Education



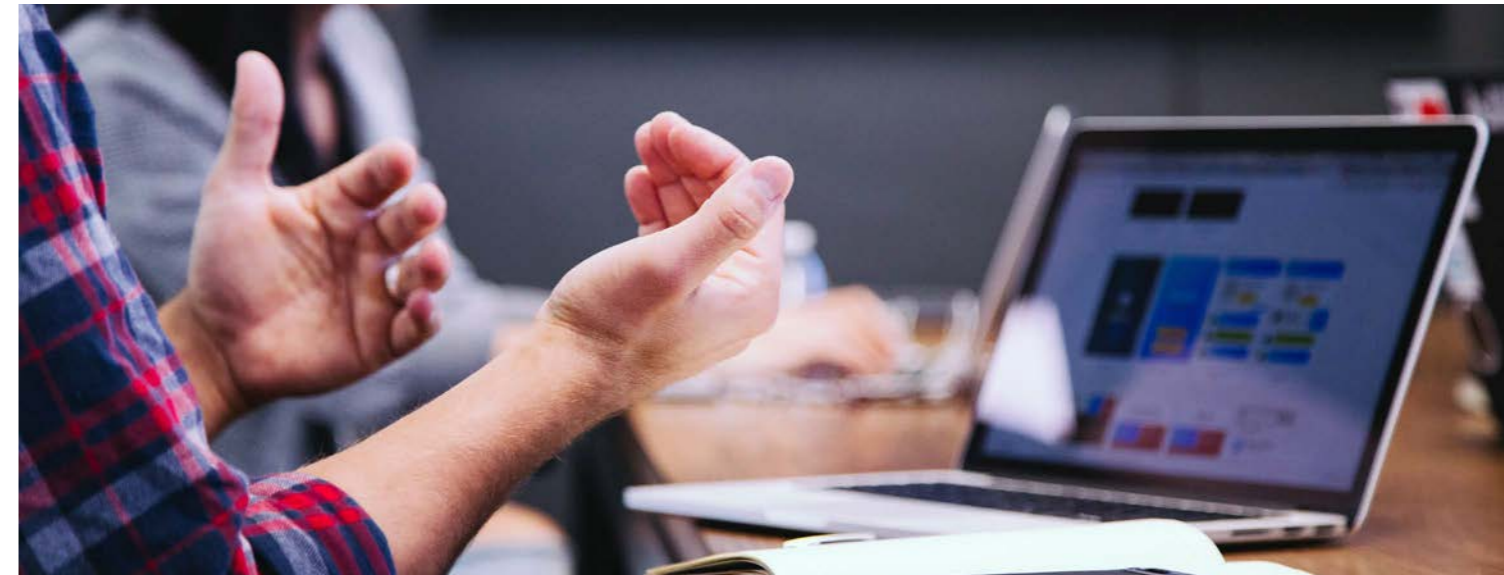
While there is already a fair amount of networking between the actors in West Central Minnesota's food system, better communication and information-sharing would mean that more people involved know about various grant opportunities, funding opportunities, changing regulations, technological innovations, etc. The objectives and strategies that follow are recommendations to increase food system coordination and education.



Objective 1: Improve communication between actors within the food system.

STRATEGIES:

- Develop an online "one-stop shopping" or "clearinghouse" for funding opportunities, information about changing regulations, technological innovations, etc.
- Host events (both in-person and online) to foster networking, information sharing, and collaboration



Objective 2: Create a West Central Minnesota Food Council that includes representation from traditionally marginalized communities.

STRATEGIES:

- Recruit members from all four counties and work together to establish bylaws and meeting schedule
- Convene a stakeholder group of residents with lived experience to advise on emergency food assistance programs and policies.
- Encourage programming that empowers underserved and underrepresented residents from each county.
- Designate specific positions within the food policy council for members of traditionally marginalized communities to ensure their voices and perspectives are reflected in policies and programs.
- Increase local knowledge of how to ensure that equity goals are reflected in budgets, leadership pipelines, recruiting methods, committee/meeting/event design, and other efforts to reduce barriers to engagement.

Goal A, Cont.



Objective 3: Educate more people about how to find local food

STRATEGIES:

- Raise awareness of existing grower directories and resources regionally (ex. Minnesota Grown, Minnesota Farmers Market Association (MFMA), federal-level resources)
- Distribute [MFMA's reference sheet](#) of annual farmers market locations/schedules and CSA providers
- Create a master list of the region's food cooperatives. (The new Food Council will keep this updated.)
- Publish a 1-pager informational sheet describing Why Buy Local for regional distribution to the public, institutions, and local governments, among others



Objective 4: Expand opportunities for producer education to grow the supply of local food in West Central Minnesota

STRATEGIES:

- Help local food producers navigate city and county policies and permits related to food production.
- Support programming to help farmers and landowners adopt practices and technologies to enhance resilience (i.e., pollinator habitat, high tunnels for season extension, cover cropping).
- Strengthen financial and in-kind support for implementation of practices that improve soil health, water quality, and biodiversity.
- Improve awareness of existing formal educational opportunities for producers (ex. community college programs, Farm Business Management, apprenticeship programs) and the scholarships available to support them



Objective 5: Reduce food waste and improve food recovery systems to supply safe, nourishing food to families in need

It is estimated that 40% of all food produced is wasted somewhere along the supply chain, but with the highest percentage being wasted at home. 30% of landfilled waste is food and compostable waste, making food the single largest contributor to landfill waste. Otter Tail County has completed waste audits every other year for about 6 years, and those show that approximately 25-27% of residential waste in FF is food waste, half of which was preventable, meaning it was food in packages or whole pieces that could have been eaten if they had been used up in time, or food was more carefully managed in the home. Based on tonnage of total waste produced (32,000 tons), approximately 8,600 tons of food is wasted in Otter Tail County each year using the 27% from the waste audit results.

STRATEGIES:

- Educate the public about alternatives to food waste using the EPA's Food Recovery Hierarchy.
- Improve coordination with each county's Solid Waste department to help reduce food waste.
- Increase the rates of donated food for human consumption and animal consumption
- Work with our local farms and each county's Solid Waste department to help make the public more aware of waste reduction options and benefits
- Establish baseline metrics regarding the amount of food waste at a county level that can be collected and analyzed over time
- Develop an outreach strategy to encourage food donations by grocers, restaurants, caterers, etc.
- Promote connections between home and community gardens and food pantries to increase fresh produce donations.

- Support existing connections and expand capacity to recover additional food.
- Build support for a local food gleaning program in the region. Gleaning programs harvest "seconds" from farmers' fields that are unprofitable for the farmers to harvest but can still provide healthy food to community members.
- Prioritized composting as a way to get more impact in food waste reduction.
- Educate the public about ways to reduce food waste at home.
- Feature food waste as a topic in social media campaigns, classes and workshops, and include food waste info and prevention in every presentation about composting.



Goal B: Increase Access to Healthy Food



The objectives and action steps that follow are recommendations to improve access to healthy food by addressing key barriers identified throughout the process. Lack of financial access (prohibitive cost of healthy food) and lack of geographic access (food deserts and transportation options) are key barriers identified by previous studies and borne out by community feedback in this process.

We also learned that time and convenience are major barriers that prevent families from buying and eating the healthy food they want.



Objective 1: Prioritize investment in the region's food deserts in both rural and urban contexts.

STRATEGIES

- Incentivize existing grocery stores, convenience stores, and mini-markets/bodegas to increase healthy food access by stocking fresh, healthy food options.
- Expand farmers markets into food deserts by partnering with businesses, schools, and nonprofits with available space.
- Support the expansion of existing mobile market efforts in low-access communities.
- Align economic development and clean energy incentives to attract grocery stores to communities that lack access to fresh food.
- Leverage underutilized space, existing transportation networks, and other existing assets.
- Promote improving food access as a market opportunity for the region's entrepreneurs.
- Leverage the region's strong startup and entrepreneurial community to market food insecurity as a business opportunity.
- Support the expansion of low-cost, low-tech solutions for food distribution to low-access neighborhoods.
- Adopt city ordinances that support local food production in food deserts like community gardens, backyard chickens, and fruit trees in public spaces.
- Encourage farms, food shelves, and food retailers to offer people more convenient options for getting healthy food like online ordering, curbside pick-up, and home delivery.



Goal B, Cont.



Objective 2: Make healthy local food more affordable

STRATEGIES:

- Support access to public food assistance programs like SNAP and WIC through marketing and promotion.
- Promote the use of SNAP at area farmers markets.
- Support Market Bucks and other programs that incentivize healthy food purchases.
- Increase consumer education, especially for populations with fixed incomes (ex. elderly), low-income, and those with specific cultural/dietary/meal planning needs:
 - Quick and easy meals
 - Lower food waste at household level
 - Financial literacy & budgeting
 - Homemaking skills (canning, preserving, freezing, etc.)
 - Household-level food production (ex. gardening)
 - Where to access in-season foods
 - Which government programs will help offset the cost of foods
 - Local food directories, food shelves, etc.
- Work with Food Policy Council to decide the appropriate level of engagement in state and federal-level policy decisions affecting food affordability, if at all



Objective 3: Improve access to emergency food assistance programs

STRATEGIES:

- Support coordination with food banks and food shelves to ensure efficient delivery of services.
- Establish or increase city/county funding for food banks, pantries, and hot meal programs.
- Support infrastructure at food pantries and food banks to increase fresh food availability, especially refrigeration and freezer units.
- Reduce barriers that individuals face to accessing food security resources, including knowing that they are eligible, and enrollment/re-enrollment.



Goal B, Cont.



Objective 4: Reduce barriers to food access through long-term transportation planning that prioritizes pedestrian access

STRATEGIES:

- Increase the bicycle and pedestrian infrastructure in the region to improve food access
- Pursue grants for sidewalks, bike lanes, and bike trails between low-income neighborhoods and food sources
- Map the region’s food deserts within both cities and in rural areas and identify opportunities to bring more food to them
- Identify opportunities to partner with transportation planners to improve connectivity of transit options for food access



Objective 5: Make the healthy food choice the easy food choice at work, school, and elderly living environments

STRATEGIES:

- Work with employers to promote healthy food access at worksites through workplace CSA programs, local food procurement policies in corporate cafeterias, on-site farmers markets, etc.
- Partner with area school districts to encourage Farm to School efforts that engage students in eating healthy, locally grown food.
- Increase Farm to Day Care and Farm to College/University efforts, with an emphasis on minority procurement.
- Establish relationships between farmers and food service directors at elderly living environments



Goal C: Increase Local Food Production



The objectives and action steps that follow are recommendations to increase the supply of local food through increased production, but also to support consumer demand and ensure that markets are available for local producers to sell to. This goal addresses both farmers and gardeners in our community, recognizing that local food is grown at multiple scales in our community. Increasing local food production in our

community can positively impact the regional economy and improve community resilience. When consumers and institutions buy directly from local producers, their dollars stay in the local economy, providing income for farmers and vendors throughout the agriculture supply chain. When residents grow their own food, it increases community food security and resilience as families learn to feed themselves.



Objective 1: Improve support for local farm and food businesses

STRATEGIES:

- Assist farmers, especially urban and peri-urban growers, with land access.
- Consider creating an inventory of vacant city or county-owned properties that could be leased to urban farmers.
- Explore ways to incentivize stewardship of sites with environmental benefits (i.e., cover cropping, perennial buffers, pollinator strips).
- Tailor economic development programs to support small food and farm businesses (i.e., a low interest revolving loan fund for local food businesses).
- Ensure economic development programs for small food businesses are accessible to, and benefit, low-income residents and people of color.
- Expand education for producers and value-added food manufacturers, especially around food safety, to help them scale up and sell to wholesale customers requiring these certifications.
- Strengthen communication between produce growers and chemical applicators to prevent crop damage/loss.
- Collect data on the local economic impacts from chemical drift.
- Advocate for farmers markets, food cooperatives, and other venues where local producers can be supported in marketing their products and consumers can take an active role in investing (as member owners, taxpayers, and patrons) for this infrastructure.
- Explore ways markets and co-ops can partner with existing public sector and private sector organizations' programming and services.
- Support the development of low-cost production and retail space to support producers with access to wholesale markets
- Support investment in regional infrastructure that addresses major barriers to market access for small-scale producers and food businesses.



Goal C, Cont.



Objective 2: Expand Local and Regional Markets

STRATEGIES:

- Partner with school districts and universities in our region to adopt their own local food purchasing policies.
- Support efforts to create facilities for “value-added” food processing, such as the effort to create a community commercial kitchen in Pelican Rapids.
- Research the availability of underutilized storage, processing and growing spaces. Promote the development of these spaces into food halls, food business incubators, etc.
- Strengthen the pipeline of future farmers by targeting people of all ages, from FFA to second or third career food production enthusiasts.
 - Help existing food co-ops, farmers markets, and farmers grow their customer base through online sales, curbside pick-up, and food delivery.



Objective 3: Expand support for urban agriculture.

STRATEGIES:

- Promote urban forestry and food forests
- Increase access to community gardens as well as the tools for community garden users
- Connect people to season extension information and resources - high tunnels, deep winter greenhouses, etc.
- Promote agricultural techniques that don’t require a lot of land (ex. hydroponics, aquaponics, pot gardening)
- Increase access to education for the public about the basics of how to grow food

Objective 4: Promote gardening – at home, in neighborhoods, and in schools



STRATEGIES

- Facilitate and leverage access to resources to assist community gardening efforts, particularly in low-income communities.
- Promote resident awareness of existing community gardening opportunities.
- Collaborate with community partners providing food production education and resources to build residents’ skills.
- Support ideas that are “outside the box” regarding what constitutes agriculture (ex. hemp or bait fish)



Objective 5: Provide more support for emerging farmers who do not come from a farming background.

STRATEGIES:

- Share information about existing local, state, and federal resources available to emerging farmers who do not come from a farming background
- Reduce barriers to knowledge gaps in areas such as technology, regulations, and finances
- Address health insurance costs and student loan debt for emerging farmers.
- Support equity and inclusivity training in farming communities to strengthen connections between current farmers and emerging farmers.
- Create specific grant opportunities for emerging farmers that will help them establish farm businesses, rather than improving or expanding an existing farm business. Consider higher percentages of cost sharing, and/or longer loan terms for emerging farmer groups.
- Implement advanced payment options for grant funding to emerging farmers, (For example, the USDA’s Natural Resources Conservation Service Environmental Quality Incentives Program issues advance payments to historically underserved farmers - before they implement new practices.
- Provide training to farm service providers to help reduce barriers for emerging farmers, including equity and implicit bias training, and alternative models of agriculture (regenerative, direct-marketing, perennial etc.).
- Provide funding for farm service providers to translate materials and training.
- Dedicate further attention to the history of land ownership and farming in Minnesota.
- Advance Farm-to-School/Institution initiatives as a market development tool for emerging farmers.
- Work to reframe the story of farming as an opportunity for underserved communities. Market the stories of emerging farmers to show examples of how farming can be practiced.

Grants & Other Funding Opportunities

The tables below have information about food system funding opportunities available in Minnesota. To learn about funding opportunities for local and regional food systems offered by the U.S. Department of Agriculture, visit: <https://www.ams.usda.gov/services/local-regional/food-sector/grants>

Food Production

Name	Description
AGRI Farm Business Management Scholarship	Provides scholarships to beginning farmers in Minnesota to learn business management strategies that will lead to profitable and satisfying farming operations.
AGRI Urban Agriculture Grant	Helps organizations and communities obtain the materials and services necessary to successfully promote urban youth agricultural education and urban agriculture community development.
AGRI Livestock Investment Grant	Helps Minnesota livestock farmers and ranchers improve, update, and modernize their livestock operation infrastructure and equipment.
AGRI Sustainable Agricultural Demonstration Grant	Funds projects that explore sustainable agriculture practices and systems that could make farming more profitable, resource efficient, or personally satisfying.

Food Aggregation, Processing, and Distribution

Name	Description
AGRI Value Added Grant	Helps Minnesota processors add value to Minnesota agricultural products by investing in the purchase of equipment, production capacity, market diversification, and market access for value-added products.
AGRI Meat, Poultry, Egg, and Milk Processing Grant	Facilitate the start-up, modernization, or expansion of meat, poultry, egg, and milk processing businesses.
Resilient Food System Infrastructure (RFSI)	One-time funding to make investments in infrastructure and equipment for food aggregation, processing, distribution, wholesaling, and storage.

Food Access and Markets

Name	Description
AGRI Farm to School and Early Care: First Bite	A small grant for school districts that have little to no experience with local procurement as part of a Farm to School program.
AGRI Farm to School and Early Care: Full Tray	Larger grants for school districts that have some Farm to School experience and want to grow their Farm to School programming.
New Markets Cost-Share	Help your Minnesota farm or branded food, beverage, or pet food company take advantage of growth opportunities through a variety of high-impact marketing activities.
Minnesota Pavilions	Offers financial, promotional, and logistical support to small-to-medium sized Minnesota food and beverage companies who want to exhibit with the MDA at select business-to-business (B2B) wholesale trade shows.
Local Food Purchase Assistance (LFPA)	One-time funding projects that: 1) Buy local food, primarily from socially disadvantaged and emerging farmers, and 2) Distribute food to underserved communities throughout the state
Statewide Health Improvement Partnership (SHIP)	Funding to access fresh, local fruits and vegetables at farmers markets, local corner stores, emergency food programs, mobile markets and other food retailers.



Resources

The writing of this document relied on the work and research of many different initiatives locally, statewide, nationwide, and worldwide, which are summarized below.

- CEDS: <https://wcif.org/regional-development/community-planning/> (Circular agriculture, pg. 20)
- Gillespie, Morgan. (2023). The Ukraine War at One Year: Resilient Food Systems Can't Wait Any Longer. *World Resources Institute*. <https://www.wri.org/insights/ukraine-war-one-year-resilient-food-systems-cant-wait-any-longer>
- Just Rural Transition Vision and Principles. (2023). *Just Rural Transition*. <https://just-rural-transition.org/vision-statement/>
- Allen, James. (2023, February 14). A deep concern: Local organizations tackling food insecurity. *Daily Journal Media*. https://www.fergusfallsjournal.com/news/a-deep-concern-local-organizations-tackling-food-insecurity/article_e3d7342e-ac8c-11ed-a830-1bb72516d72e.html
- Ear to the Ground 283: Ending the Extractive Economy. (2023). *Land Stewardship Project*. <https://landstewardshipproject.org/podcast/ear-to-the-ground-283-ending-the-extractive-economy/?emci=06070bf9-a2a1-ed11-994c-00224832eb73&emdi=3312f5c2-3fa2-ed11-994d-00224832eb73&ceid=6006586>

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Appendix A: Input from November 30 Asset Mapping Session



The following guests were in attendance:

Alyssa Athman (Mahube Otwa), Nick Murdock (City of Perham), Ed Gehrke, Verna Kragness (Prairie Rose Farm), Janet Lindberg (Pelican Rapids Food Shelf), Josie Gereszek (Moorhead Farmers Market), Brett Olson (Renewing the Countryside), Marilyn Hofland (UMN Extension), Matt Barthelemy, Benjamin Velani (WCI), Sharon Bacon, Kristie Leshovsky, Katilynn Swanson (RSDP SE), Michele Anderson (Springboard for the Arts), Jennifer Hansen, Cedar Walters (Otter Tail County Solid Waste), Jordan Sligar (CERTS), Mitchell Coulter (Northarvest Bean), Erika Franck (Clay County Planning Tech), Michaela Schell (Dakota Business Lending)

Highlights from Session #1 Jamboard Exercise

- Developing a Shared Vision
- Know Your Farmer!
- Less Waste – And a Commitment to Composting
- Easy Access to Locally Grown Food
- Sustaining and Thriving Small Towns
- Supporting Local Farmers and Local Food
- Accessible
- JOY
- No Hungry Kids or Adults
- 50% of Food comes from Local Farmers
- Minimal Food Waste
- Vulnerable Populations have Easy Access
- to Good Food
- Culturally Appropriate Food Available Year-Round
- More Greenhouses to Grow Food Year-Round
- Affordable CSAs

Food Production

- Lida Farm, Pelican Rapids, Ryan Pesch
- Amor Pork Store, Battle Lake, MN
- Farm at Saint Francis, CHI Saint Francis Health, Breckenridge
- Bluebird Gardens CSA
- Amish Communities
- RD Offutt Potato Growers
- Bean Processors in Perham: Kelly Bean, Ottertail Bean, The Bean Mill
- New Roots
- Perham: Bongard's Cheese, Shearers Snacks
- Homegrown Gardens, Fergus Falls
- Falls Baking Company, Fergus Falls
- Three Bears Honey, Moorhead
- Ten Finns Creamery, Menagha
- Food of the North, Moorhead
- Lake Region Takes Root, Jason Bergstrand
- Maple Hills Orchard, Detroit Lakes

Processing, Distribution, and Aggregation

- Amish Communities in Frazee, Pierz, Fertile
- Meat Processing in Dilworth and Frazee
- Manna Coop, Detroit Lakes, MN
- Good Acre
- Farmers Markets as Food Hubs
- Sheep Farmers in Becker, Clay, Wilkin, and Otter Tail (20)
- Ruby's Pantry
- Mason Brothers and Russ Davis, Wadena, MN
- Sysco and SpartanNash, Fargo
- Square One Kitchen Rental, Fargo, ND
- Salad Makers (Moorhead) processing

Markets and Purchasing, Marketing

- Sprout, Little Falls
- Rural Grocery Stores
- Community Gardens
- Red River Harvest Cooperative
- Mahube Otwa, Detroit Lakes
- Moorhead Farmers Market, Josie Gereszek
- North Country Food Bank
- SNAP

Preparation and Consumption

- Pelican Rapids Commercial Kitchen Effort
- Education about Preparation of Fresh/ Whole Foods
- Mann Food Coop and Roasted – Meal Prep
- Regional Foodies on TikTok/Instagram: Molly Yeh (Grand Forks) the Midwest Mom (Frazee)
- Snap-Ed Educators
- School/Daycare Breakfast Needs Healthier Improvements – This is how kids' relationships with food begin
- Access to Fresh Produce and Meal Planning
- Food Trucks! Offering more variety than there used to be.
- Make it easier for people without a car to walk or bike to food sources!
- Museums – Good potential resource for sharing culture and history of food, instilling pride in prep and consumption
- Cooking classes at Community Ed

Resource and Waste Recovery

- Making wasting food more emotionally difficult by creating and understanding of what it took to produce that food item – education and value placed on food.
- More education on date labeling and good Samaritan donation for food – you're not held liable for donating food!
- What opportunities exist to make circular economies of energy (digesters, compost heating greenhouses)?
- Incorporating clean energy (solar, electrification, anerobic digesters) into composting (Talk to CERTs/RSDP!)
- Ruby's Pantry – Distributes excess food to hungry people
- Backyard composting education programs
- OTC Organics Recycling Program for Large Waste Generators

Who else should be here? How will we get them here?

- Gardeners and Master Gardeners (Garden Connectors)
- Minnesota Growers Association
- Funders
- Cooks/Kitchen Staff at Local Restaurants
- EDC's and Local Chambers
- School Boards/Superintendents
- Restaurant Owners
- Food Banks
- Minnesota Grown
- MN Farm Bureau
- Culinary Corps
- Cass Clay Food Partners
- Recent immigrants
- Youth
- City Council Members
- Growers
- Emergency Food Assistance
- TFC Poultry, Ashby
- LGBTQ Folk
- Agrigrowth Association
- Agriculture Utilization Research Institute (AURI)
- New Roots Farm Incubator
- Native Americans
- Hunger Solutions
- Sustainable Farming Association
- BIPOC
- Minnesota Farmers Union
- Senior Programming Coordinators
- School District Food Services
- Renewing the Countryside
- Commodity Associations
- Land Stewardship Project



Appendix B: Input from December 3 Asset Mapping Session



The following guests were in attendance:

Barry Thoele (Barry's Cherries), Martin Mollenhauer (Otter Tail County GIS), Noreen Thomas (Doubting Thomas Farms), Mallory Forseth (MN Grown), Zoe Absey (Great Food Bank), Alyssa Athman (Mahube Otwa), Ryan Pesch (Lida Farm/UMN Extension)

Developing a Shared Vision

- Nutritious, high-quality, culturally relevant, locally grown and locally processed food is abundantly available, affordable, and accessible.
- Healthy diets, higher quality food
- Everyone can bike, walk or roll to great food!
- Communities free from food insecurity
- Conservation plans for clean water and soil health.
- Strong public demand for local foods
- Layered farmers and dual use farms
- Consumers know where to find local foods, local food producers know where to find consumers/markets.
- Food producers are making fair wages and feeling supported by consumers and their communities.
- Healthy and successful population
- Growing is economically sustainable.
- Community commercial kitchens!
- Utilizing the gleaning program!
- Efficient use of resources.

Food Production

- Sprout MN
- Superior Fresh in WI – example of aquaponics
- Fertile Soil, Adequate water, cheap energy
- PartnerSHIP 4 Health programs
- Growers at the Fergus Falls farmers market\
- Institutional buyers – schools, hospitals, etc.
- LLCMR funds to do research into aquaponics
- Barry's hydroponic produce
- Greenhouse grants
- Fergus Falls farmers market infrastructure

Processing, Distribution, and Aggregation

- Retail rescue of extra produce from Spartan Nash, Sysco, etc. going to local food pantries
- Spartan Nash
- Case Corporation planting specifically to donate
- Encouraging farmers, household gardeners to plant a row for charitable feeding network
- Food bank or food shelf partner with local producers on creating hydroponic systems that would create weekly deliveries
- Sysco
- Cash Wa
- Gleaning potatoes, winter squash, sweet corn, example Case Corp Fargo plant
- Use extra meals from restaurants and large quantity items coming from Spartan Nash, etc. to prepare well-balanced ready to eat meals for families and individuals
- Great Plains Food Bank
- Local Farmers donating extra produce to pantries
- Red River Harvest Coop

Markets and Purchasing, Marketing

- Minnesota Grown – Directories (Wholesale and Consumer), Marketing Materials, Labeling/Signage Cost Share, Statewide Advertising Campaigns – Mallory F
- New Fergus Falls Marketspace!
- MANNA Food Market in Detroit Lakes and Meadowfarm Foods as retail spaces that features local.
- Have some chefs that have featured local – Spanky’s, Fabled Farmer I Fergus, there are more...
- Pelican Rapids put in for farm-to-school procurement grant.
- Detroit Lakes has history of some local purchase – put in for full tray grant for 2023
- Farm to school programs – MDA – Kate Seybold, Regional Marketing Specialist and Emily Mehr, Grants Specialist
- New Markets program at MDA helps with costs of tradeshow, in-store demos, and e-commerce – Jennifer Alexander is the contact.
- We’re doing a wholesale readiness cohort starting in 2023.
- Pelican started WIC farmers market nutrition program this year.
- Deep Roots festival – SFA chapter in region
- LREC selling to Larry’s supermarket in Pelican Rapids.
- Buyer/Farmer networking sessions happening as part of GAPs training this year – put on by Extension, RTC & MFMA – Analisa Hultberg @ Extension
- Food assistance programs that encourage local food buys – Market bucks (Hunger solutions), Farmers Market Nutrition Program (MDA- Emily Mehr)

Preparation & Consumption

- Effort to Develop a Commercial Kitchen in Pelican Rapids
- Community Garden Plots available in Detroit Lakes
- Detroit Lakes Mahube Otwa:
- Extension/Head Start Zoom Cooking Classes – Want to move from Zoom to in person, but need a commercial kitchen
- Snack Packs provided to families during COVID - \$15 worth every two weeks of nutrition snack items
- Mahube Otwa partnered with White Earth to create a Community Garden at the DL office.
- Public School Backpack Program
- Head Start family coaches provide rides for family to the food bank when needed – need for reliable transportation access.
- Free meals (breakfast, lunch, PM snack) for Head Start children while in care through the Child and Adult Care Food Program.
- Mahube Otwa = Mahnomen, Hubbard, Becker, Otter Tail, Wadena counties

Resource and Waste Recovery

- Need to get folks in a room together to discuss ideas (solid waste departments), Need peer learning opportunities.
- Need more research on the benefits of composting.
- “Take Jack Back” program (composting from farmers program)
- Bio-digestion efforts (Denmark)
- AURI
- Microsoft bio-digester on their campus (40 tons of food waste)
- Funding for compost efforts: county, EPA, MPCA





Appendix C: Input from December 6 Asset Mapping Session



Who else should be here? How will we get them here?

- Watershed Planning Professionals
- Extension
- Master Gardeners
- School District/Food Service
- Restaurant People?
- Wholesale Buyers – co-ops, grocery stores, schools, hospitals, etc.
- Plant Breeders
- LIRS – they recently received a grant to work with new refugees and farming
- Jack Wood – Growing Together Gardens
- County Solid Waste Folks
- Soil Scientists
- New Roots Incubator Farms
- Faith Community
- Probstfield plot in Moorhead – their Board!
- Lenders/sources of capital – banks, FSA

Action Steps

- Send an email to 1 watershed 1 plan for the region
- Maybe engage restaurant people through a hosted meal at one of their places – build community between them
- Jason will contact Jack Wood
- Otter Tail public waste – Cedar Walters
- very engaged and accessible – grew up on organic operation and knows community. Ryan can contact.
- RYAN: New NRCS person in WOT (forgot her name) reached out to SFA chapter to lend assistance.

The following guests were in attendance:

Caitlyn Doll (Student MSUM), Joan Ellison (Multicultural Committee), Brittany Cameron (City of Moorhead), Brittney Johnson (Farmer/SFA), Jordan Sligar (UMN Extension/Clean Energy), Nicole Outka (Great Plains Food Bank), Noelle Harden (UMN Extension), Grace Liao

Developing a Shared Vision

- The money we invest in our food system is reaching the people who need it most and those who will champion the necessary changes.
- Living wage for producers.
- We are feeding our community in every way. We are nourishing our bodies, our minds, healing our communities and our land by changing our regional food system.
- Resilient. To both market forces and environmental.
- Increase overall well-being that can be related back to mental health, social wellness, emotional health, etc.
- People have the time to prepare healthy food and the money to purchase healthy, fresh ingredients.
- Positive nutrition experiences for our youth to support life-long health and wellness.
- Get the big guys involved.
- Producers and community members have shared ownership over our land and water resources.
- Joyful, wholesome, safe
- Producers have diverse local options for inputs and sales.
- Free school lunches and breakfasts
- Decreased use of foodshelf and backpack programs

Food Production

- Food Forests (various fruits) at MB Johnson Park, Romkey Park, and Ellen Hopkins School in Moorhead.
- Infrastructure and livestock supplies at Fleet Farm.
- Policies that dictate what can happen on the land in an urban or rural setting – think municipal and county zoning.
- Master Gardner groups
- Minnesota Central Kitchen
- Farmer Networking at Manna Food Co-op
- High-paying jobs to finance all the capital inputs small farmers need
- AG solidarity network (MOSES/Marblessed)
- U of M extension specialists
- Growing together and other community gardens
- FFA
- Moorhead does lease agreements with farmers for \$1 per acre. Unfortunately, there are challenges in the lease structure for our most vulnerable farmers.
- Red River Harvest Co=op and farmers markets
- New Roots Farm incubator in Moorhead area.
- Retiring farmers
- Tool and supplies on FB marketplace
- Jared Luhman @ the MN sustainable Farming Association
- Zach Paige at North Circle Seeds
- Seed drills at the SWCDs
- Hay and livestock sales on Craigslist
- Minnesota Farmers Union Foodshed-can connect with other producers
- Lad Stewardship Project Land Clearing-house
- Community Gardens
- The Cass Clay Food Partners has also done a lot of work on food policy locally - including backyard chickens, boulevard gardens, etc.
- Reddit or other online forums for emergency questions.
- Healthy aquifers and soils.

Processing, Distribution, and Aggregation

- Manufacturing expertise regionally
- Salad Makers in Moorhead?
- Churches that allow growers to use their kitchens. What about schools?
- Square One and other commercial kitchens.
- Meal kits. White Earth Nation.
- Heart O'Lakes Meats
- Moorhead Farmers Market Food Hub
- New York Mills Meat Locker
- Andy Hayner
- AURI

Markets and Purchasing, Marketing

- The sale barns in Perham and FF market our livestock for us if we don't have enough direct sales.
- Local artists for commissioning logos/art/promotional materials
- Online education/virtual meetings
- Word of Mouth
- Community newspapers
- Lake associations
- Lunch and learns with large stakeholder companies
- Transparent information on packaging
- Facebook and Instagram
- Manna Food Coop
- Farmers Markets
- Food bank/food shelves
- MFU Foodshed
- Road signs
- Farm to school
- Moorhead public schools has been getting back into Farm to School purchasing for example.

Preparation & Consumption

- Our grandmas
- Influencers – education/cooking classes, Tik Tok, Instagram.
- Extension SNAP-Ed does cooking and nutrition with low-income audiences throughout the region
- Family Wellness in Fargo does Cooking in the Classroom with local elementary schools.
- And works on policy, systems, environmental change efforts related to food success and nutrition.
- Potlucks – someone brings something great, and you want to copy it.
- The Internet
- Marilyn Hofland@SNAP-Ed
- Food Demonstrations at Food Shelves
- MFU Efforts (cookbook, calendar, etc.)



Resource and Waste Recovery

- Clay County did a household waste audit this fall and included food waste in the sorting process from what I understand
- Municipalities are interested in food waste recovery – I believe Otter Tail county has implemented a new system for food waste collection?
- Manure!
- MIDA Methane Digester Loan Program
- UMM Morris is a good resource for large scale composting. Pope and Douglas County are a resource as well.
- USDA Rural Energy for America Program Grant
- There is a policy in Moorhead that allows residents to compost. This is not allowed everywhere but I would guess most municipalities allow in West Central.
- GleaND – gleaning network in Fargo Moorhead area
- Perham incinerator
- Great Plains Food Bank does Retail Rescue/Agency Enabled Retail Rescue
- OTC Recycling Program
- Meal Repack Program out of Minnesota Central Kitchen
- On-farm solar

Who else should be here? How will we get them here?

- Immigrant farm and food system laborers exploited by our current food system.
- Young people and those who work with them – schools, childcare providers, headstart, etc.
- People trying to navigate food assistance programs and food shelves – what do they see as assets and challenges
- In tandem, food pantry/shelf coordinators & volunteers
- New leadership
- Business incubators
- Clay County Public Health

Action Steps

- Maybe use Great Plains Hunger Study as a secondary data source and consider how to invest in focus groups to hear from key audiences.
- Personal invitations
- Send e-mail to Fargo Moorhead Economic Development Corporation to invite to future events.

Appendix D: Summary of Asset Mapping Session #1 November 30



Key highlights:

- Identify the current strengths and celebrate.
- Identify gaps to improve.
- Habits inform culture; we can change those habits.
- Inspire and empower to shape the narrative of local foods, co-creative process.
- Build a sense of community; food should bring people together and be joyful and a privilege.
- There are many ways to access foods.
- Food sometimes seen as part of the problem; would like to change that perspective to food being part of the solution.
- Debt cycle of food - what happens after use? What organizations could benefit from after use like composting?
- How would physical infrastructure work together to achieve sustainable change?
- Affordability for consumers while balancing livability of the producer, culturally appropriate food, all people have access, no child goes hungry.
- Healthy food options on the menu at public spaces!

Potential action steps from our first Asset Mapping Session:

- Being in relationship is the first step - showing up for people.
- Host community meal(s) to build relationships and engagement to the work.
- Engage the household gardeners.

Appendix E: Summary of Asset Mapping Session #2 December 3



Key highlights:

- Healthy food options on the menu at public spaces
- People who grow food should be able to make a living, a system supports people to get in the business and stay in the business
- Layered and dual use farm, think about ways to partner with others to strengthen our farm examples: partnered with beekeeper that pollinates our buckwheat, partnered with cattle farmer to eat grass we did not want to mow.

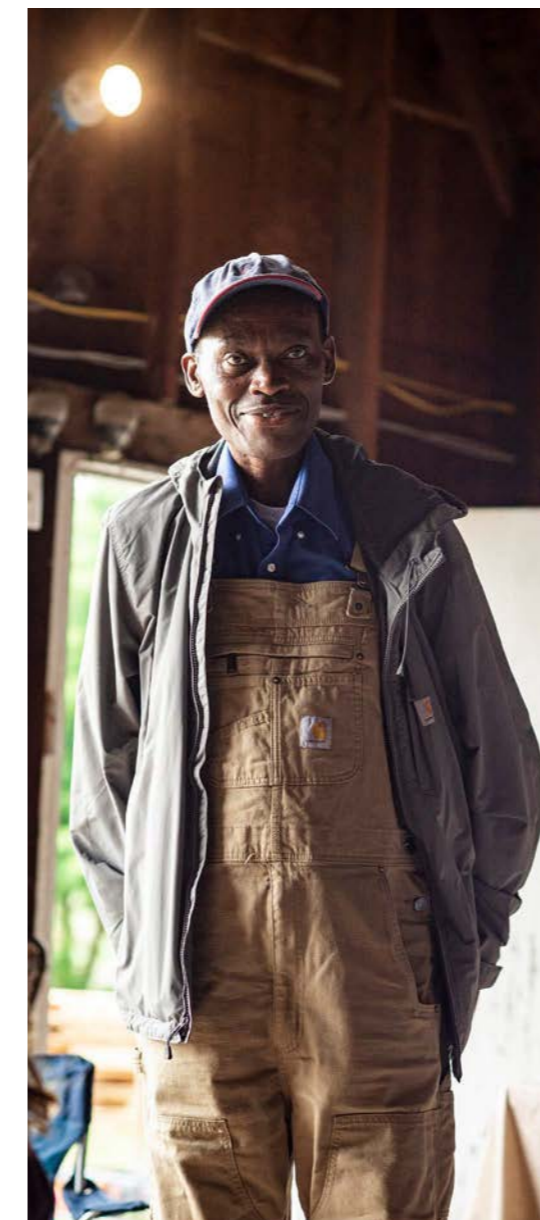
Potential action steps from our first Asset Mapping Session:

- Stay involved in the process, watch for online survey, next summer face to face gatherings, attend lunch & learn, provide feedback to the regional food system draft, consider being a part of the food council to advance priorities from the plan
- Hold public input meetings during summer 2023 to refine goals more formal public
- Do you have local connections for us to create a relationship with so we can host public event in various locations in the four counties?
- Farm tour spring/summer 2023
- Ryan Pesch leading two projects: a mixed produce enterprises study & a wholesale readiness study
- Barry Thoele (LCCMR grant) supporting aquaponics bait fish project, the project is looking for other partners in region to participate in study and markets

Appendix F: Summary of Asset Mapping Session #3 December 6



Highlights from our third Asset Mapping Session (paraphrased and summarized):



- People who grow food should be able to make a living to do so
- Intersection of different goals, sustainable farming, ecosystem
- A lot of capital in the world but sometimes it is out of balanced with current food economy
- Watershed, soil conservation, pollinators
- When food system is working at its best, politics don't matter as much

Potential Action Steps from our third Asset Mapping Session:

- Hold public input meetings during summer 2023 to refine goals more formal public
- Do you have local connections for us to create a relationship with so we can host public events in various locations in the four counties?
- Farm tour spring/summer 2023

Appendix H: Food System Survey Questions



- West Central Minnesota Regional Food System Plan Survey
- To build a strong local food system, the community needs a roadmap to guide the process. We need to know where and how to invest time, resources, and partnerships to best support a vibrant local food economy. This survey has 15 questions and will take about 15 minutes to complete. After completing the survey, you will be entered into a drawing to win a \$100 gift card to the grocery store of your choice.

A strong local food system can:

- Encourage profitable agriculture and food businesses,
- Support entrepreneurs in agriculture and food,
- Create new jobs and opportunities,
- Make it easier to obtain healthy, nutritious foods for all,
- Support skills in gardening and food preparation,
- Protect soil, water, and air quality,
- Reduce food waste
- Celebrate diversity of food and agriculture in our community, and
- Encourage all to participate in the food system.

1) Please indicate your involvement in the local food chain:

Producer Nonprofit Food Co-op Distributor School
 Restaurant Farmers Market Food Shelf Healthcare Grocer
 Consumer

2) What do you see as the main barriers to PRODUCING local food?

3) What do you see as the main barriers to BUYING local food?

4) What is an example of something positive that came about from the pandemic that you would like to see more of?

We want to understand your priorities for improving the food system.

5) Which of the proposed food plan goals below do you think are most important to the

community? (Pick your top 5)

Increase Local Food Production (more fruits, vegetables, meats, etc. produced by local farmers or in gardens, farm incubators, producers working together to grow larger amounts of one or two crops)

Increase Access to Healthy Food (making it easier for community members to get affordable, healthy, and culturally appropriate food they want to eat)

Expand Distribution & Aggregation capacity (how might producers work together to gather products for orders and shipping, what distributors are currently working with local food producers, what are the expectations regarding delivery, pickup, minimum volumes, pricing, packing, food safety, etc.)

Expand Food Processing and Manufacturing capacity (assess who in region is available, is current demand meeting need, are mobile processing units an option, Halal certification)

Expand local & Regional Markets (create and/or maintain marketing channels that may include Direct to Consumer, CSA, Farm to Institution, Wholesale, Farmers Markets, Food Co-ops, Food Hubs)

Provide More Business Development Assistance (creating a business plan, applying for grants, finding niche markets, creating promotional plans, etc.)

Protect Natural Resources (food production practices that protect soil, air, and water)

Reduce Food Waste (composting, food recovery, and other means to avoid food being thrown out)

Improve Social Equity (food system policies and programs that address barriers related to race, gender, economic status, sexual orientation, etc.)

Grow our Regional Economy (support and build local food-related businesses - farms, restaurants, grocery stores, food manufacturers, etc.)

Build Upon our Communities' Cultural Food Traditions (celebrating and growing the diverse food cultures in our community, producing food that our grandmothers would recognize, etc.)

Increase Food Knowledge and Skills (gardening, hunting/fishing/foraging, nutrition education, cooking classes, recipes, storing food and food safety, etc.)

Better Food System Jobs (livable wages, safe, healthy, and supportive workplace conditions, and access to health care and other benefits)

Climate Resilience (reducing greenhouse gas emissions, sequestering carbon, adapt-

ing to extreme weather and new pests and diseases)
 ___ Other (Please specify) _____

6) Bolstering public, private, and nonprofit collaboration is key to sustainable food system development. Name two organizations who may be important to this work:

7) Government actions can help address inequities in the food system. What is one local, state, or federal government action you believe can help make a difference? _____

8) Based on the following list, rank your reasons for buying from local sources: (1=highest, 6=lowest) ___to support local farmers ___sustainability ___ environmental concerns ___more nutritious ___taste better___ builds community ___

9) What other reasons do you have for buying local food? _____

10) What is a resource that you wish you could use, or that you wish existed?

11) What is an underutilized resource within your community or the west central region of Minnesota?

12) What is your zipcode?

13) Which gender do you identify with?
 ___Female ___Male ___Non-binary ___Prefer not to say

14) What racial background would best describe you?

- American Indian or Alaskan Native
- Asian / Pacific Islander
- Black or African American
- Hispanic, Latinx, or Spanish
- White / Caucasian
- Multiracial or Multiple Ethnicities
- Other: _____

15) What is your age? ___16-24 ___25-34 ___35-44 ___45-54 ___55-64 ___65-74 ___75+

Participants sent to Thank You page

Thank you Page Content:

Thank you so much for participating in this short survey! Your feedback will go a long way towards building a thriving food system in West Central Minnesota. We'd love to have your continued engagement in this process.

In order to protect your privacy, we've set up a separate form for you to share your contact information to enter into the raffle for the \$100 giftcard to the grocery store of your choice, to stay informed about updates on this project, and/or indicate interest in a food policy council. Take me to Part II: <https://forms.gle/5GU3uASqM7CkYRbh6>

Separate Form

Please share your interest in the following:

_ Yes! Sign me up for updates on the development of the regional food systems plan. This could include upcoming public events, notification of when our survey goes live, opportunities to weigh in on community engagement design, participation in a farm tour, and more.

_ Yes! I'm interested in helping advance the recommendations of the regional food plan by participating in a Food Policy Council. *We'll likely be hosting an informational session on what a food policy council is and how it works, so by checking this box, you're simply expressing interest and not committed to anything just yet*

Name:

Email:

Submission form response after part II:

Thank you for your participation! We'll be in touch soon. Feel free to share this link with a friend so they can enter to win, too!

<https://partnership4health.org/regional-food-plan/>

Please direct questions to:

Jason Bergstrand at jason.bergstrand@claycountymn.gov

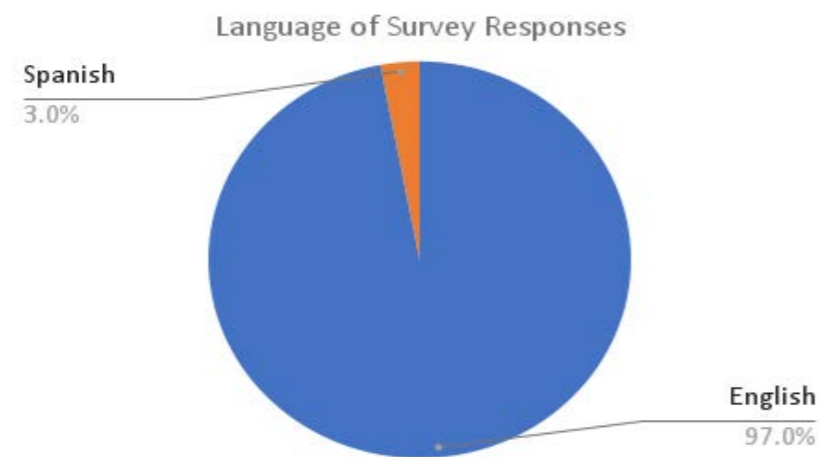
Appendix I: Food Survey Distribution



The survey in Appendix D was distributed in the spring of 2023 primarily through electronic means in five languages: English, Spanish, Somali, Bosnian, and Kurdish and resulted in 467 responses. The results are summarized below.

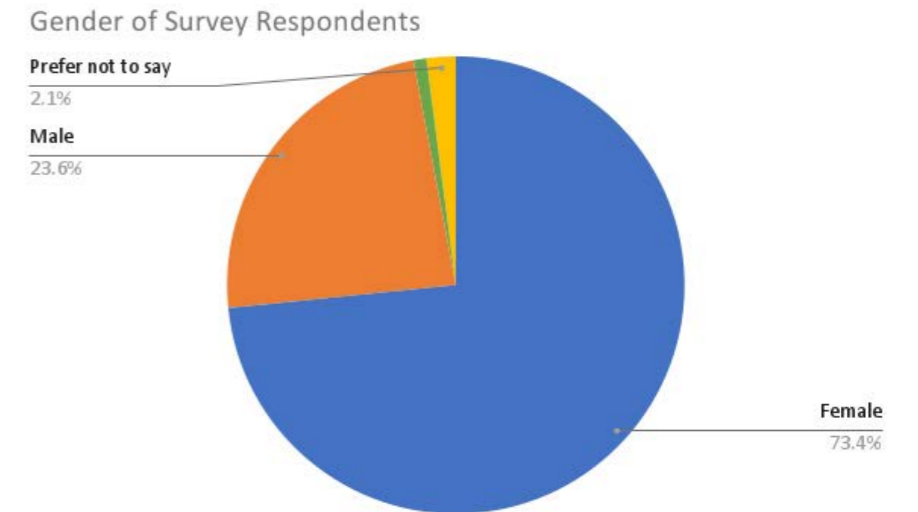
Summary of Respondents:

We received a total of 467 responses to the survey. There were 453 responses in English, and 14 responses in Spanish.

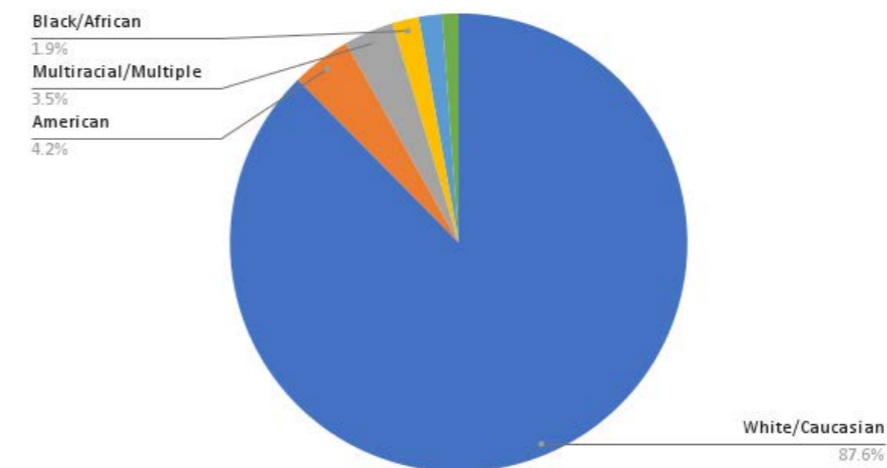


Regarding the question “please indicate your local involvement in the food chain”, the most common answers in descending order were “Consumer”, “Producer”, “Food Coop”, “School”, “Non-Profit”, “Healthcare”, “Restaurant”, “Distributor”, “Farmers Market”, “Food Shelf”, and “Grocery Store”.

Regarding gender of respondents, 320 indicated that they were female, 103 indicated that they were male, four said that they were non-binary, and nine indicated that they preferred not to say.



Race/Ethnicity of Survey Respondents

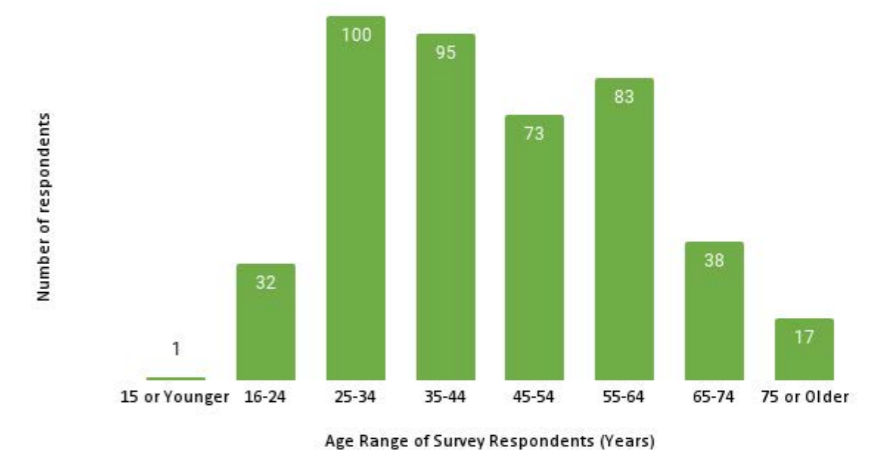


Regarding race or ethnicity, 374 indicated that they were White/Caucasian, 18 indicated that they were American Indian/Alaskan Native, 15 indicated that they were Multiracial/Multiple Ethnicities, eight indicated that they were Black/African American, seven indicated that they were Hispanic/Latinx/Spanish, and five indicated that they were Asian/Pacific Islander.

Hispanic/Latinx/Spanish, and five indicated that they were Asian/Pacific Islander.

With respect to age, one respondent was age 15 or younger, 32 were from 16 to 24, 100 were from 25 to 34, 95 were from 35 to 44, 73 were from 45 to 54, 83 were from 55 to 64, 38 were from 65 to 74, and 17 were 75 or older.

Age of Survey Respondents



Sample Answers To Questions

Why is it hard to PRODUCE local food?

You have to have the correct weather conditions and soil conditions. If you don't, you can't produce anything

Production is not as difficult as marketing. New problems happen most every year. The key is to identify and make adjustments for the immediate year or for the next growing season.

Demand may be different than what can be produced due to seasonality of food

Land access barriers. Barriers to accessing capital. Lack of navigators to help new and existing farmers learn about resources, training, and education. High cost, slim margins.

Not a lot of market for the food I'd want to produce. My son and I tried to sell organic gluten free cupcakes at the farmer's market one year and despite only charging a dollar and making sure they were tasty and pretty, people told us they didn't want gluten free or organic.

The economy as well as labor are major reasons why it is hard to produce local food. We have the ability to have school gardens, but that means that we have to have people that tend to it and for MN that means time of the year that we generally have minimal staff. The weather and labor are huge parts of why it is hard to produce local food.

Producing local food can be a challenging endeavor for several reasons. One major hurdle is the difficulty small businesses face in securing the necessary start-up funds, investments, and financial resources. This has become increasingly challenging in recent years, as the cost of living continues to rise, creating significant barriers to entry for individuals interested in participating in the local food system.

Another challenge is the limited access to land ownership or leasing, which can make it difficult for individuals to establish and maintain their own local food production. Additionally, many individuals lack the necessary business skills and resources to effectively market and administer their operations, even if they have a passion for growing food for their community.

Finally, the cost of operations for producing local food can be high, while the return on investment is often low. This can make it difficult for small businesses to remain financially viable and sustainable in the long term. "

As a school district I currently don't have the resources to make this a possibility. Our district is trying to get FFA started but are having a hard time finding an Agriculture teacher.

It takes a lot of time and effort. The perishability of the food is a big factor. It needs to be picked at the peak of ripeness for the best flavor. Then it needs to be harvested with care to preserve quality. Then it needs to get to the point of purchase/use at an opportune time. For example, at the food shelf, we are only open one day a week. Holding produce over for a week is difficult, the quality deteriorates. We don't have the cooling capacity to hold quality. Since I'm a college student and don't have my own house yet, I can't grow my own food when I am in the FM area for the school year because of the weather.



Why is it hard to BUY local food?

It is not affordable to purchase local 'fresh' food anywhere. Healthy eating is expensive.

The stores a lot of people shop at do not carry food from local vendors. We mostly see locally raised food at farmers markets.

most people like one stop shopping and typically locally grown food is not available in stores and local needs to be more affordable

Easy access. I don't have time to go to multiple different places for groceries (mostly I do grocery pickup) so if local food is only available at a farmers market then I don't go there out of my way.

Food needs to be available during more hours like a grocery store, not a 4 hour slot on a certain day of the week like a farmer's market.

People without a car are at a real disadvantage in rural Otter Tail County. Even people who live in town have difficulty buying in bulk or hitting sales if they don't have wheels.

Being a school district, we have strict rules/regulations to follow that make it hard to buy food from anyone. We also do not have the funds to support it when buying local, many times means that it is more expensive.

There are several reasons why it can be difficult to buy local food. One of the main reasons is that local food production tends to be smaller scale, and may not have the same level of distribution and marketing infrastructure as large-scale industrial food systems. This can make it challenging for consumers to find and purchase local food, as it may not be as readily available or visible in mainstream grocery stores or markets.

Another challenge is that the cost of local food production can be higher than that of industrial agriculture, due to the smaller scale and higher labor costs involved. This

can translate into higher prices for consumers, making local food less accessible for those on a tight budget.

Additionally, there may be limited options for purchasing local food in some areas, particularly in rural regions. My area is an agricultural epicenter, yet has very limited access to fresh fruits and vegetables grown locally. This can make it difficult for consumers to access local food even if they are willing to pay a premium for it.

Unless I am buying directly from Red River Harvest Co-op, a farmer/vendor at the Red River Market, a local shop where the food is made (e.g., Great Harvest Bread Co.), it's hard to know where to go to find local food. The average person is not going to go out of their way to find it. Convenience is key. Price/cost is also important, but convenience is more important. Additionally, as a consumer society, we are conditioned to buy what we like when we want it and not consider if something is in season and/or if it had to be shipped from a long ways to get to our grocery store. Also, if someone wants the convenience of pre-made food that only needs to be baked/heated, it's harder to find this option with local food (unless you want frozen pizza).

It's not for me but it depends on what you are looking for: in Fargo Moorhead there is one or multiple farmers market each week from mid May to Oct and a couple CSA's you can get vegetables and for honey one of the local producers has it in several local stores, Many FM grocery stores have tomatoes from Detroit lakes. Several meat markets carry regional meats - Hutterites from Glyndon sell product in a couple stores. Many local jam and jelly producers - one has a shop in Moorhead center mall.

What is an example of something innovative in food/agriculture that came about from the pandemic that you would like to see more of?

CSAs seem to be very pandemic-friendly, allowing people to access local food they might be too busy to shop for during a more traditional Farmers Market window

Backyard flock egg sales and other "hobby" local foods being offered for sale to friends and coworkers.

More experimentation of cooking from scratch at home, gardening, and self-sustaining practices.

Being able to call your order in to the facility and pick up your groceries.

Feeding kids during the pandemic was admirable. Schools came up with innovative ways to accomplish that task.

There are a lot more options for accessing food and information on a mobile device now than there was three years ago. More stores and restaurants have websites that consumers can order from or find information on specific products. I think it could be beneficial for local producers to be integrated more into that sphere, and make the idea of purchasing local food more approachable to all.

People have been realizing that many epidemics and pandemics have been caused by animal agriculture. So many people have been breaking from and changing up traditions by embracing plant based meats, dairy, and eggs. I know so many people who have been learning how to make homemade seitan, especially from washing the starch from all-purpose or bread flour, leaving the pure

wheat protein. Taking this blank slate, one can add any spices or flavorings you like.

People stayed home and cooked for themselves. There was an increase in home preserving. We need the extension service to engage in educating people about how to preserve their own, garden their own and feed themselves. That is as local as you can get. People are always asking me how to skill up in that area.

An innovative example in food/agriculture that arose during the pandemic is the growth of online marketplaces and delivery services for locally sourced food, such as Farmigo, LocalHarvest, and Good Eggs. These platforms offer a direct connection between consumers and small-scale farmers and food producers, promoting sustainable agriculture and supporting local communities. This not only provides consumers with access to high-quality, fresh, and nutritious food, but also reduces their carbon footprint and boosts the local economy. Additionally, the pandemic has underscored the significance of investing in local food system infrastructure, which can increase the capacity of small-scale farmers and food producers to meet their community's needs, promote food security, and build more resilient and sustainable food systems.

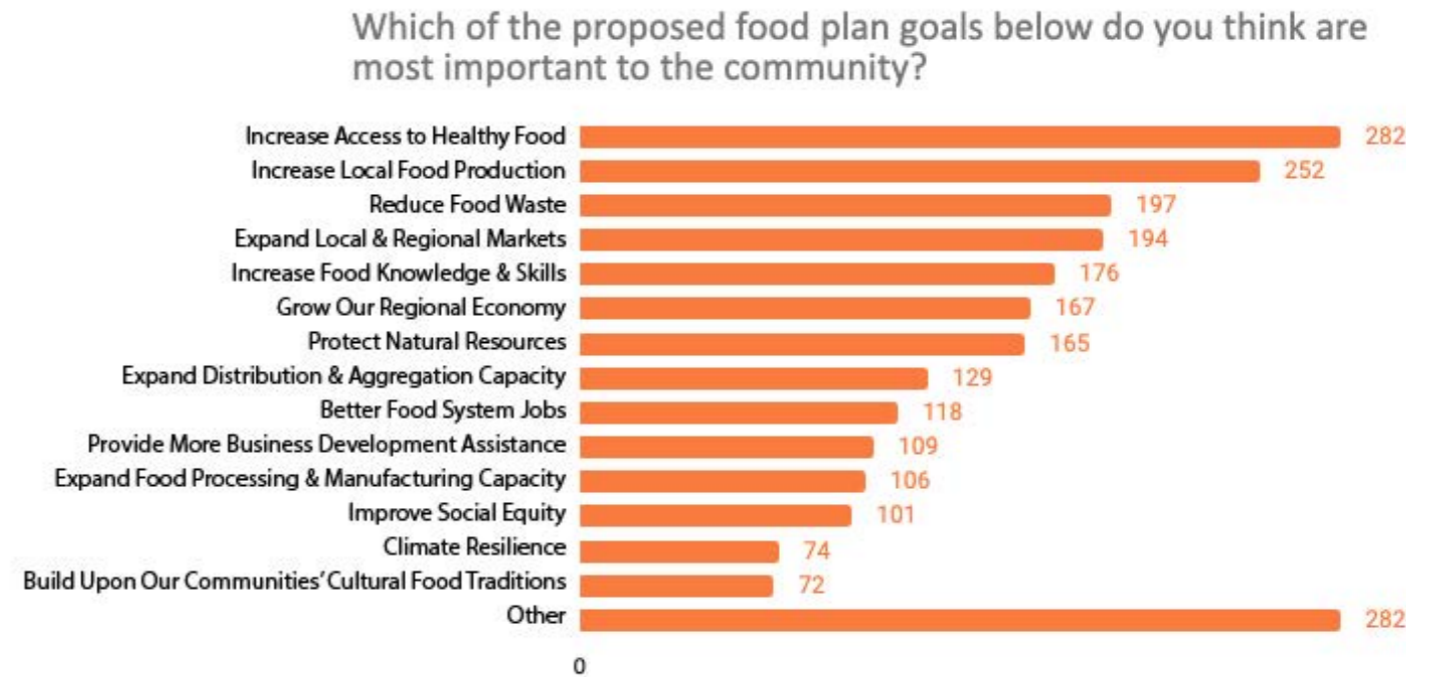
Supporting community-owned deep winter greenhouses, for instance, can offer a year-round source of fresh produce in rural communities where access can be limited, and provide economic and environmental benefits such as reduced transportation costs and greenhouse gas emissions.

People interested in supporting local farmers in order to improve the community. I don't think that the public had any idea how consolidated the food system is until it failed during the pandemic.

Universal meals. The pandemic caused a lot of schools to shift to box to tray foods. It seems we lost the balance of scratch or speed cooking to just heat and serve. I don't think in the school world much innovation was done during the pandemic except for universal meals.

More people turned to container gardening, however people who have complex health disparities find it difficult to set this up if they live in an apartment with many stairs to climb.

Food System Priorities



Government actions can help address inequities in the food system. What is one local or state government action you believe can help make a difference?

Allow SNAP to purchase CSA shares, Farmers Market goods, vegetable plants or fruit trees and WIC

Fewer regulations for the retailer if the store is operated by the producer

The proposed increase and improvement in WIC and SNAP benefits, and more awareness of food assistance programs.

Increase SNAP benefits and include fresh food coupons for farmers markets for SNAP

Increase in learning opportunities for the public involving awareness programs related to environmental health, food safety, composting, etc. These important lessons should be offered free to the public.

Continue the increase in SNAP benefits after the inflation rates have made groceries too expensive for many working and even middle class families to afford.

More state grant funding for rural grocery investments and upgrades, and market innovation like unmanned markets

Some financial encouragement for small local grocers to secure local produce and offer it at a reasonable rate in store.

Grants for farmers market growers to build greenhouses to grow during colder months.

More government support for small producers of livestock for things like fencing, handling and buildings. All of these help support us by being able to have healthier livestock.

To address inequities in the food system, supporting local food producers can be a critical government action at the local or state level. In Minnesota, for example, this action not only addresses food access and equity issues in rural areas but also promotes strong regional economies and builds resilient supply chains. With almost half of Minnesota's counties classified as rural and experiencing poverty and limited access to fresh and healthy food options, the state government can provide funding and grants for local food infrastructure development, offer technical assistance and training, and incentivize the development of local food systems through

tax breaks and financial incentives. These actions can encourage small-scale farmers and food producers to sell their products locally, leading to more sustainable and resilient food systems that benefit everyone in the state.

Cities/Counties could convene small, diverse local producers to address their needs to expand markets within region. This could address inequity in the food system by targeting for local aid those small, family farms run by new Americans, BIPOC community members, and getting them involved in the governance of funds, land-access, and food system policy.

Require institutions like schools to designate a certain percentage of their food budget (example 10%) towards purchasing local foods. With the state of MN now providing funding for school breakfast and lunch programs this should be achievable.

Promote food stockpiling and encourage private investors to engage in food stockpiling

Remove regulations around food packaging, distribution, certification and pasteurization that are expensive for small producers.

Local governments running community gardens including educating people about which crops are feasible and how to grow them.

Elected officials becoming more informed about the food system and their role - look to Cass Clay Food Partners for a model of what this can look like.

What is an UNDERUTILIZED food, agricultural, or health resource within your community or the west central region of Minnesota?

The older farmers

Fishing and hunting

Moorhead Farmers Market

Water testing options through county office or SWCD office.

The ability to accept SNAP payments

People are not encouraged to compost to decrease waste. This could be used for soil health and help global warming by avoiding the landfill.

Hydroponics

THERE NEEDS TO BE MORE FAMILY AND CONSUMER SCIENCES TAUGHT IN HIGH SCHOOLS!!!!!!

Community gardens for schools. Teaching our children how they can help improve quality of life, and give them the knowledge they need to help maintain safety and health of plants, animals, the environment, and themselves. Knowledge is power, and our children are the future!

Many local gardeners have too much produce- if we could find a way to share the produce so it does not get thrown away.

Seed library

One underutilized resource in the region could be heritage crops, which are crops that have historical and cultural significance and have been passed down from generation to generation. These crops often have unique flavor profiles, nutritional benefits, and re-

silience to local environmental conditions. However, many farmers have shifted towards modern crop varieties, leading to a decline in the cultivation of heritage crops. Promoting the cultivation and consumption of these crops could help preserve cultural traditions and promote biodiversity.

Another underutilized resource could be community gardens and urban farming initiatives. These initiatives provide access to fresh produce in urban areas, improve food security, and promote healthy eating habits. Community gardens can also provide social and educational opportunities for community members to learn about agriculture, nutrition, and sustainable living practices. The public space we have is not well main-

tained so the farmers use a parking lot for the market. We could take fallen buildings off city property to convert into community space for farmers markets and gathering.

I'm not sure that underutilized would be correct, but I believe that local food shelves need more support and infrastructure. The fact that they struggle is my concept of them being underutilized.

The agricultural resources of Midwest Minnesota may be underutilized. For example, there may be more land in this region that could be used for agricultural production, but it may be underutilized due to a lack of investment and technical support



Appendix J: MDA Food Tour



The West Central Minnesota Regional Food System Plan Committee organized a tour for officials from the Minnesota Department of Agriculture of various food-related initiatives in Becker, Clay, Otter Tail, and Wilkin counties. The tour took place from Friday, June 23 to Sunday, June 25, 2023. The following is a summary of the sites that the tour visited, and some takeaways regarding the local food system.

Friday, June 23: The Farm at St Francis, Breckenridge (Wilkin County)

Luke Preussler with Catholic Health Initiatives explained that the inspiration for their Community Health project came from Lake Region Takes Root, the community garden in Fergus Falls owned and operated by Lake Region Healthcare. Luke explained that The Farm donates the bulk of the produce to the local food pantry and uses some of the food in the hospital cafeteria, along with providing produce to clinic patients experiencing food insecurity. Rick Abrahamson, who manages The Farm, explained how the high tunnel works to extend the growing season in a cold climate. Project goals include providing access to land and technical assistance to emerging farmers and



facilitating community education on healthy eating and agriculture. (Photo courtesy of PartnerSHIP 4 Health)

Velma Bjorgum, a food pantry volunteer, gave an overview of the Richland-Wilkin Emergency Food Pantry mobile unit, which travels to several highly rural communities within Richland, ND and Wilkin, MN counties on a rotating schedule. The trailer was purchased from a company that makes “ice castles” for ice-fishing. The Food Pantry had the trailer customized for their own use. Tour participants were able to walk through the mobile food pantry to see how the items inside were organized and displayed. (Photo courtesy of PartnerSHIP 4 Health.)

Friday, June 23: Prairie Rose Farm/New Roots, Felton (Clay County).

In the evening the group visited New Roots, an organization that helps immigrants/New Americans get involved in farming. The organization was started by Verna Kragnes at Prairie Rose Farm. The tour participants listened to testimony from New American farmers involved in the program about various products that they are raising and selling, including chickens and sorgum. MDA officials gave an overview of programs to help small farmers.



Saturday, June 24: The Foundry, Fergus Falls Farmers Market, Fergus Falls (Otter Tail County).



The original plan for Saturday was to meet in the morning at the Fergus Falls Farmers Market, but the location was changed to The Foundry due to weather concerns. The Foundry is an organization in Fergus Falls to help start-up businesses. The Foundry provides working space, meeting space, and basic technology for new entrepreneurs. Speakers at The Foundry included Klara Beck with the City of Fergus Falls, who explained the downtown redevelopment that included a pavilion for the Farmers Market. (The Farmers Market had previously been located in front of the Otter Tail County Historical Society, using tents because of the lack of a permanent structure.) Klara also explained future phases of the redevelopment. David Lindig spoke about his plans to ensure that his land continues to be farmed after his passing. Patricia Wahl with Greater Fergus Falls also explained how The Foundry operates. (Photos courtesy of PartnerSHIP 4 Health.)



Saturday, June 24: Pelican Rapids Community Garden, Pelican Rapids (Otter Tail County).



Later in the morning the group met at the Pelican Rapids Public Library. Julie Tunheim, manager of the Pelican Rapids Community Garden explained about the operations of the garden. Judy Tabbut spoke about Mercantile on Main. Joan Ellison described the local effort to create a commercial kitchen in Pelican Rapids, known as the “Friendship Kitchen”. Pelican Rapids Mayor Brent Frazier talked about

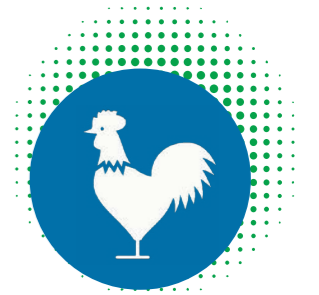
the “Local Foods, Local Places” initiative. The group also took a tour of downtown Pelican Rapids, including “Pelican Market, the farmers market in Pelican Rapids.

Saturday, June 24: Cornerstone and True Blue Flower Company, Frazee (Becker County).

The evening stop was originally scheduled to take place outdoors at True Blue Flower Company, but again the venue was changed to Cornerstone in Frazee because of weather concerns. This stop featured an explanation and tour by Karen Pifer of Cornerstone, which is Frazee’s new Youth and Community Center. The group also heard from Bayleigh, the owner of True Blue Flower Company and from Bridget Guiza, a White Earth resident about her local food efforts. Kent Sheer also talked about Green Island Preserve. (Photos courtesy of PartnerSHIP 4 Health.)

Sunday, June 25: Manna Food Coop, Detroit Lakes (Becker County.)

The final stop on the tour was Manna Food Coop in Detroit Lakes. The group heard from Ryan Pesch, Marketing Director for the Coop, as well as Zach Paige, president of the Coop and owner of North Circle Seeds. The group also heard from PJ and Karla Breen, who raise bison. (Photos courtesy of PartnerSHIP 4 Health and Kathleen Theresa.)



Appendix K: Urban Agriculture Ordinance Examples from Brainerd and Bemidji

Brainerd

- [Brainerd, Minnesota Zoning Code](#)
- [Chicken and/or Duck Permit Application](#)

ZONING DISTRICT	Section Reference	RL-1	RL-2	GL	CN-1	CN-2	TN-1	TN-2	TN-3	GC	CC	TC	MS	ME	GI	PSP	P
RESIDENTIAL USES																	
Agriculture uses		P	P														
Accessory buildings under 200 SF	515-4-6	AP	AP	AP	AP	AP	AP	AP	AP								
Accessory buildings over 200 SF	515-4-6	P	P	P	P	P	P	P	P								

ZONING DISTRICT	Section Reference	RL-1	RL-2	GL	CN-1	CN-2	TN-1	TN-2	TN-3	GC	CC	TC	MS	ME	GI	PSP	P
Animal hospital, veterinary clinic, or kennels	515-3-5							C	C	C	C			C	C		
Armories										C					P		
Auto dealership	515-3-6									C	C			C	C		
Bed and breakfasts	515-3-9	C	C	C	C	C	C	C	C			C	C				
Boarding houses						C		C	C								
Brew Pub/Brewery (off-sale, on-sale, taproom, tasting room, etc.), cidery, microdistillery, cocktail room	515-3-10							C	C	C	C	C	C	C	P	P	
Nurseries, greenhouses (commercial)	515-3-15	P	P					C	C	C	C			C	C		
Seasonal Merchandise Sales include fruit/vegetables, Christmas trees, plants and ancillary products in which less than one half of										AP	AP	AP					

P – Permitted, AP - Administrative Permit, C - Conditional Use Permit, I – Interim Use Permit, Blank – Not Permitted

515-6 Rules and Definitions

23. Farm. Real property used for commercial agriculture or horticulture comprising at least twenty (20) contiguous acres and which may contain other contiguous or noncontiguous acreage, all of which is owned or leased and operated by a single family, family corporation, individual or corporation.

24. Farm, Limited (Hobby Farm). A limited farm is a food producing use primarily intended for the use of the residents and on parcels of from one (1) to twenty (20) contiguous acres in size. Limited farming uses may include the production of crops, such as fruits, vegetables, flowers, plants,

515-3-15 Commercial Greenhouse

Commercial greenhouses supporting the operations of a floral shop or licensed food establishment must comply with the following minimum standards:

1. Structure framing shall be treated wood, aluminum, or steel and shall be covered by materials as regulated by Section [515-

- 4-6] of this Ordinance.
- 2. Structure shall not exceed 15 feet in height.
- 3. Structure may be located on a separate lot from the establishment or floral shop it supports provided that: a. The lot is within 150 feet of the principal business. b. The structure shall meet the setback requirements of the Base Zoning District or 10 feet from all property lines, whichever is greater.
- 4. No outdoor storage is permitted.
- 5. Indoor storage shall be limited material incidental to the operation of a greenhouse.
- 6. Should the establishment or floral shop cease operations, the greenhouse must be removed within 60 days.
- 7. Sales shall only occur at the principal place of business that is supported by the greenhouse.

Table 515-2-1.1. Zoning Districts, District Type and Character Areas.

District Type	Zoning District	Abbreviation
Base	Character Area: Agricultural and Rural Districts	
	Rural Living 1	RL-1
	Rural Living 2	RL-2
Base	Character Area: Contemporary Residential Districts	
	Contemporary Neighborhood 1	CN-1
	Contemporary Neighborhood 2	CN-2
Base	Character Area: Traditional Neighborhood Districts	
	Traditional Neighborhood 1	TN-1
	Traditional Neighborhood 2	TN-2
Base	Character Area: Traditional Neighborhood Districts	
	Traditional Neighborhood 3	TN-3
	Base	Character Area: Downtown Districts
Town Center		TC
Main Street		MS
Base	Character Area: Commercial and Industrial Districts	
	General Commercial	GC
	Commercial Corridor	CC
	Makers + Employment	ME
	General Industrial	GI

Greater Bemidji Area Joint Planning Board Zoning & Subdivision Ordinance

Commercial Land Uses																	
Agriculture, Animals, and Natural Resources																	
Agriculture (Crop Farming)	A	A	A	A												A	A
Agricultural Building		C	C	C													
Agriculture, Domestic Animal Farm (>3 Acres)		A	A	A	A	A											1021
Agriculture, Domestic Animal Farm (>1 <3 Acres)		P	P	P	P	P											1021
Agriculture, Non-Domestic or Exotic Animal		I	I	I	I	I	I										1021
Agricultural Produce, and Livestock Sales (Land owner property)		A															
Animal Breeding		I								I						P	
Animal Kennel and Grooming / Boarding										I	I	I	I	I	I	I	I
Land Alteration/ Tree Removal not Incidental to Permitted Use	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Forestry, Land Management and Timber Harvest	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Mining or Extraction (Sand, Gravel, & Peat)		I	I							I							I
	C	R-1	R-2	R-3	R-4	R-5	R-6	MH	B-1	B-2	LC	LD	UR	OM	U	I-1	I-2

P = Permitted Use
 C = Conditional Use, If a Conditional Use Permit is required and the use will be located in a leased space, the Interim Use Permit shall be required.
 I = Interim Use
 A = Allowed Without Permit
 A blank means the use is prohibited and may not occur within the district. Some uses may also be more restricted by performance standards, or special provision related to that use. If a land use is not displayed in this matrix

see Section 301. Allowed, Permitted, Conditional, and Interim Uses.
 R-1 = Rural Residential
 R-2 = Suburban Residential
 R-3 = Suburban Residential
 R-4 = Moderate Density Residential
 R-5 = High Density Residential
 B-1 = Low-Density Commercial
 I-1 = Light Industrial
 I-2 = General Industrial

Appendix L: Glossary of Acronyms



Acronym	Meaning	For More Information
AGRI	Agricultural Growth, Research, and Innovation	https://www.mda.state.mn.us/grants/agri
AURI	Agricultural Utilization Research Institute	https://auri.org/
BIPOC	Black, Indigenous, and People of Color	https://www.nytimes.com/article/what-is-bipoc.html
CERTs	Clean Energy Resource Teams	https://www.cleanenergyresourceteams.org/
CHI	Catholic Health Initiatives	https://www.catholichealthinitiatives.org/
CPI	Consumer Price Index	https://www.bls.gov/cpi/
CSA	Community Supported Agriculture	https://minnesotagrown.com/csa/
EDC	Economic Development Commission	https://www.greaterfergusfalls.com/

Acronym	Meaning	For More Information
EPA	Environmental Protection Agency	https://www.epa.gov/
FFA	Future Farmers of America	https://www.ffa.org/
FSA	Farm Service Agency	https://www.fsa.usda.gov/
GAPs	Good Agricultural Practices	https://extension.umn.edu/growing-safe-food/good-agricultural-practices-basics
GIS	Geographic Information Systems	https://ottertailcounty.gov/departments/gis/
GleaND	GleaND	https://www.gleand.org/
LCCMR	Legislative-Citizen Commission on Minnesota Resources	https://www.lccmr.mn.gov/
LFPA	Local Food Purchase Assistance	https://www.mda.state.mn.us/business-dev-loans-grants/minnesota-local-food-purchase-assistance-program
LGBTQ	Lesbian, Gay, Bisexual, Transgender, Queer	https://www.hrc.org/resources/glossary-of-terms
LIRS	Lutheran Immigration and Refugee Service	https://www.lirs.org/
LREC	Lake Region Electric Cooperative	https://www.lrec.coop/

Acronym	Meaning	For More Information
MAHUBE-OTWA	Mahnomen, Hubbard, Becker, Otter Tail, Wadena	https://mahube.org/
MDA	Minnesota Department of Agriculture	https://www.mda.state.mn.us/
MFMA	Minnesota Farmers Market Association	https://www.mfma.org/
MFU	Minnesota Farmers Union	https://mfu.org/
MOSES (Now known as Marbleseed)	Midwest Organic and Sustainable Education Service	https://marbleseed.org/
MPCA	Minnesota Pollution Control Agency	https://www.pca.state.mn.us/
MSUM	Minnesota State University Moorhead	https://www.mnstate.edu/
NRCS	Natural Resources Conservation Service	https://www.nrcs.usda.gov/
OTC	Otter Tail County	https://ottertailcounty.gov/
RFSI	Resilient Food Systems Infrastructure	https://www.ams.usda.gov/services/grants/rfsi
RSDP	Regional Sustainable Development Partnerships	https://extension.umn.edu/regional-partnerships

Acronym	Meaning	For More Information
RTC	Rural Transportation Collaborative	https://www.tvoc.org/services/transportation/rural-transportation-collaborative/
SFA	Sustainable Farming Association	https://sfa-mn.org/
SHIP	Statewide Health Improvement Partnership	https://www.health.state.mn.us/communities/ship/index.html
SNAP	Supplemental Nutrition Assistance Program	https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program
SNAP-Ed	Supplemental Nutrition Assistance Program Education	https://extension.umn.edu/teaching-nutrition-education/supplemental-nutrition-assistance-program-education-snap-ed
SWCD	Soil and Water Conservation District	https://bwsr.state.mn.us/soil-water-conservation-districts
UMM	University of Minnesota, Morris	https://morris.umn.edu/
UMN	University of Minnesota	https://twin-cities.umn.edu/
USDA	United States Department of Agriculture	https://www.usda.gov/
WCI	West Central Initiative	https://wcif.org/
WIC	Women, Infants, and Children	https://www.health.state.mn.us/people/wic/index.html

Appendix M: Measuring the Western Minnesota Food Systems Network



Social Network Analysis

Social networks are defined as a set of nodes (or network members) that are connected by one or more types of relationships (Marin and Wellman, 2011). Social network analysis (SNA) is a tool for measuring the connections between nodes and the strength of those connections. Measuring the connections between the nodes in a network provides insights into the structure of that network, so the results of an SNA often include both metrics and maps.

Methodology

To measure the connections between people in the food system in Becker, Clay, Otter Tail, and Wilkin counties, an online survey was distributed to a pool of 85 people. Potential respondents were associated with one of four sectors: business, government, grower/producer and nonprofit. Thirty-nine people responded to the survey.

The survey asked respondents to review a list of the individual names of the other survey respondents, and indicate which option best described how they interacted with each person specifically regarding food issues in Becker, Clay, Otter Tail, and Wilkin counties. The scale used for the level of connections was based on the four Cs of inter-organizational partnering: communication, cooperation, coordination, and collaboration (Martin, Nolte, & Vitolo, 2016). The options were:

- No interaction.
- We communicate. We exchange ideas and information.
- We cooperate. We have independent goals and agree not to interfere with each other.
- We coordinate. We coordinate our work to achieve a common goal.

- We collaborate. We work or have worked together to create something new that neither of us could have created on our own.

Results

If every person in the network were connected to every other person in the network there would be 6,840 connections. The results of the SNA identified 440 connections, a network density of 6.8%. The network density was higher than the density measured in the Richland-Wilkin network in 2022 (6.2%) (Figure 1). The SNA also indicated the Becker, Clay, Otter Tail, and Wilkin network to be a more centralized network, with four survey respondents that were more connected with others in the network (Figure 2). An analysis of the data by sector revealed significant overlap between sectors and highlighted the importance of individuals in the nonprofit sector as boundary spanners between sectors (Figure 3).

The maps on the following pages provide three views of the network. The network members are color-coded as follows:

- Business
- Government
- Grower/Producer
- Nonprofit

Figure 1- Map of Becker, Clay, Otter Tail and Wilkin Food System (2023) showing all nodes and all connections

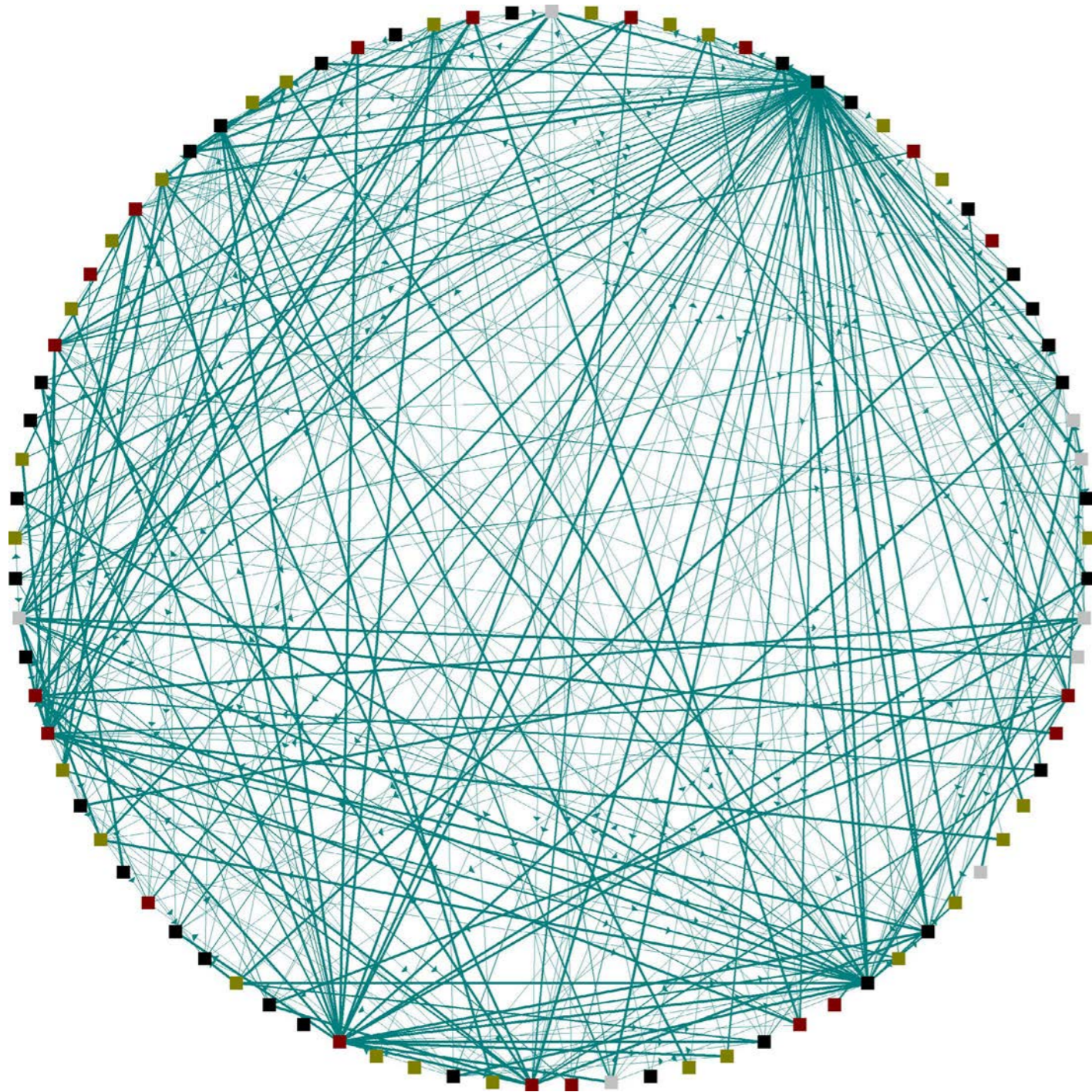


Figure 2 - Map of Becker, Clay, Otter Tail and Wilkin Food System (2023) showing four central nodes that are highly connected within the network.

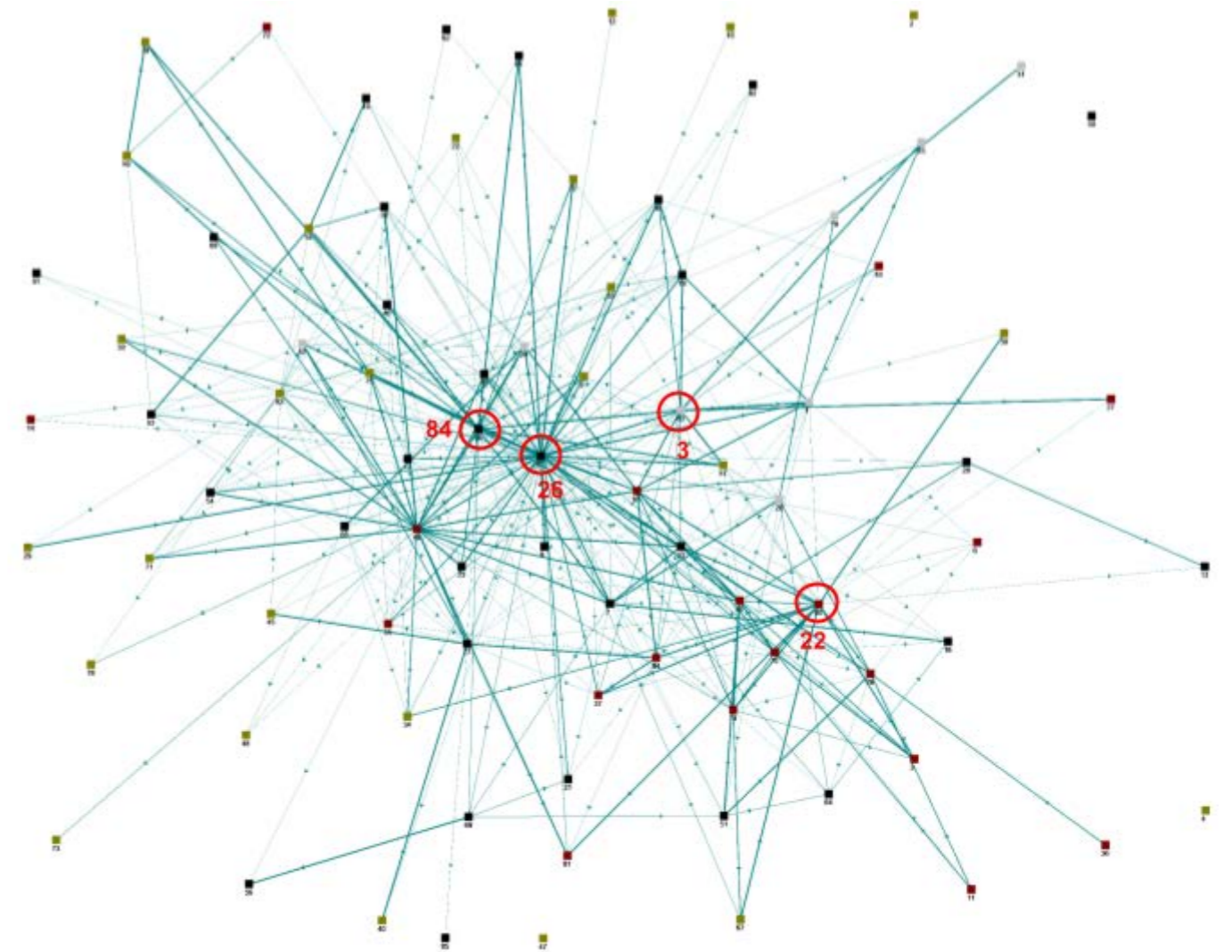
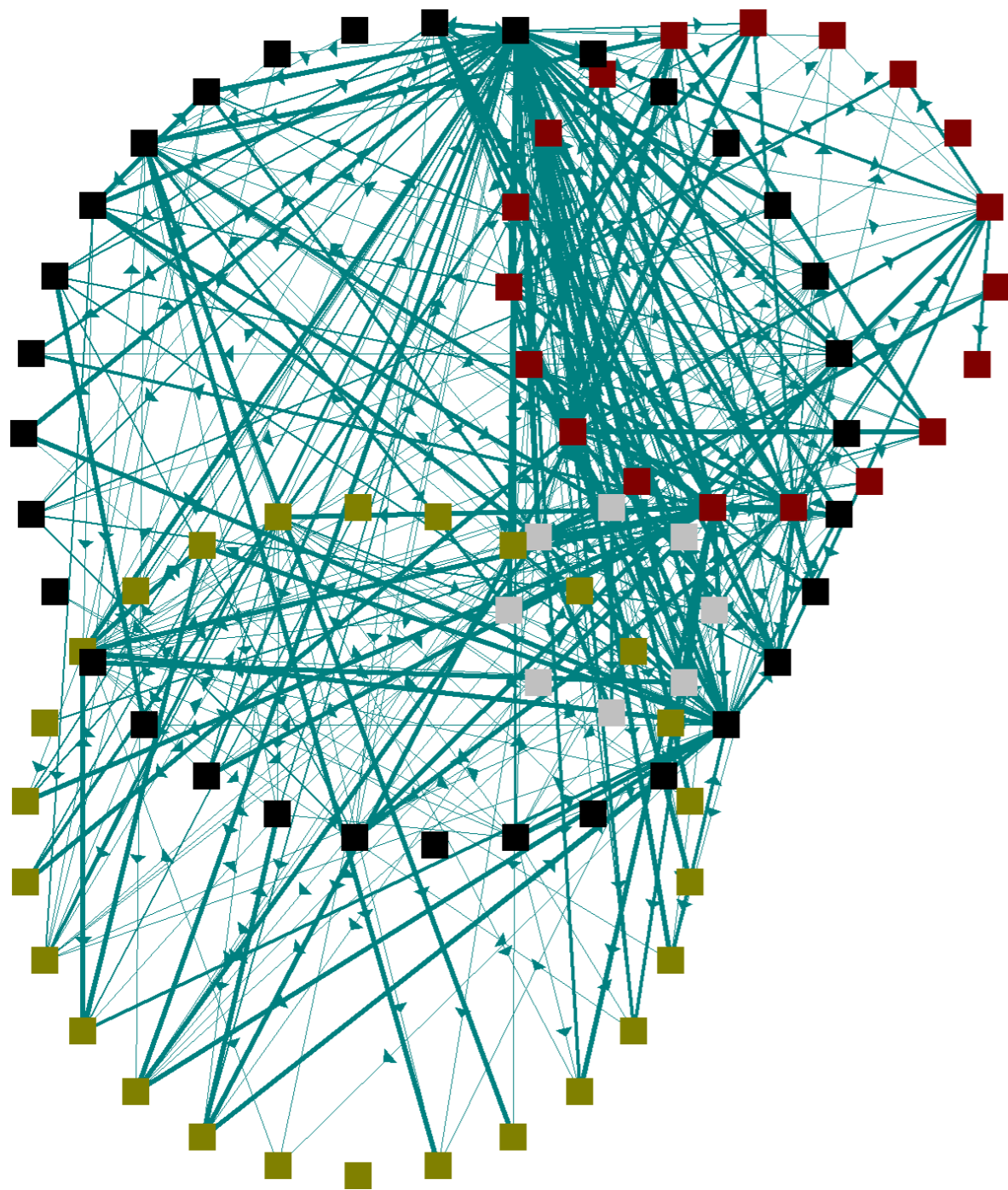


Figure 3 - Map of Becker, Clay, Otter Tail and Wilkin Food System (2023) by sector showing overlap between business (gold), government (black), grower/producer (dark red), and nonprofit (gray) sectors



Recommendations

According to Curtis Ogden of the Interaction Institute for Social Change, a healthy collective action network is one that is “able to achieve its collective purpose/core functions, while also addressing the interests of its members, and continuing to be adaptive to changing circumstances” (2022). Ogden suggests the following features of healthy networks include:

- Diversity of membership
- Intricacy of connections (many pathways between nodes)
- Common sense of purpose or mutuality; a sense of a “bigger we”
- Robustness of flows of a variety of resources to all parts of the network
- Shared responsibility for tending to the health and activity of the network
- Resilient and distributed structure(s) with a variety of shared stewardship roles
- A sense of equitable belonging and ability to give to/benefit from the network
- Ongoing learning and adaptive capacity

Based on the 2023 SNA, the Becker, Clay, Otter Tail and Wilkin food systems network should focus on three of these features.

Intricacy of connections (many pathways between nodes)

While the network is denser than the Richland-Wilkin network measures in 2022, the connections between individuals in the network could still be increased. Raising awareness of the existence of this network and letting network members know that they belong to this network would be effective first steps in creating more connections.

Robustness of flows of a variety of resources to all parts of the network and Resilient and distributed structure(s) with a variety of shared stewardship roles

The centralization that was found in the analysis of this network could potentially impede the flow of resources and lead to a network structure that is not as resilient as a more distributed structure. The connections of the four individuals that are more highly connected are an asset to the overall network. These individuals should not step back from their roles in the network, but should step into the role of network weaver, helping to develop additional connections between others in the network.

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We are a collaboration of community partners in Becker, Clay, Otter Tail, and Wilkin counties working to reduce costs associated with chronic disease and improve the health of our residents through preventive strategies that support sustainable changes in our schools, communities, workplaces, and health care.