

# Section 06

## Local Food + Agriculture



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# Local Food

## In Albert Lea



**2**

Community gardens



**9%**

Food insecurity in Freeborn County



**1,511 acres**

Crop and pasture land in Albert Lea

## Local Food and Agriculture

### Why Local Food and Agriculture Are Important

Food and climate change are directly linked. For nutritionally insecure people, climate change is a threat multiplier. Extreme weather events, extreme temperature variations, changes in precipitation, changing soil temperatures and other climate impacts will affect crop yields. Climate impacts can also introduce interruptions in the current food processing and distribution system. Disruptions that occur in the food system are likely to cause food availability or pricing fluctuations.

Our choices about what we eat and where our food comes from also directly impact our personal and community greenhouse gas emissions. Transporting food across long distances burns fossil fuels and emits greenhouse gases. In addition, the extended period of time of long-distance transport increases the need for refrigeration. The less transportation and refrigeration needed to supply us our food, the more sustainable it becomes.

Strengthening local food sources can address both climate change relationships with food and also supports your small business local economy. Studies have indicated that nearly 32 jobs are created for every \$1 million in revenue generated by produce farms involved in a local food market, compared to only 10.5 jobs for those involved in wholesale channels exclusively. Increased local food systems also increase community resilience. A robust local food system establishes additional supply chains and resilience to distribution disruptions. Healthy local food systems can also play a critical role in addressing food access vulnerability and food insecurity within neighborhoods of higher vulnerability. Increased local food systems also tend to increase diversity and long-term food system resilience in food crops cultivated.

### Community Gardens Per 100,000 Residents

|                                      |      |
|--------------------------------------|------|
| United States:<br>18,000 Total (est) | 5.5  |
| Twin Cities Metro:<br>600 Total      | 18.3 |
| City of Albert Lea:<br>2 Total       | 11   |

(Sources: American Community Gardening Association, Star Tribune, Albert Lea Tribune)

### Equity Considerations

- People in low-income neighborhoods may have limited access to full-service supermarkets or grocery stores - an area known as a "food desert."
- Studies have also shown that communities with fewer resources often have more outlets that promote unhealthy dietary behaviors such as fast food restaurants, and little access to affordable nutritious food. This condition is known as a "nutrition desert."

## Climate Change Considerations



### Climate Hazards

Hazards to the local food and agriculture system include reduced crop quality and yield, vulnerability to pests and soil moisture as well as fluctuation in availability, food price volatility and change.



### Opportunities

Increased capacity of local food and agriculture systems and improved farm-to-table approaches can reduce community food insecurity while creating local jobs and improved community resilience.





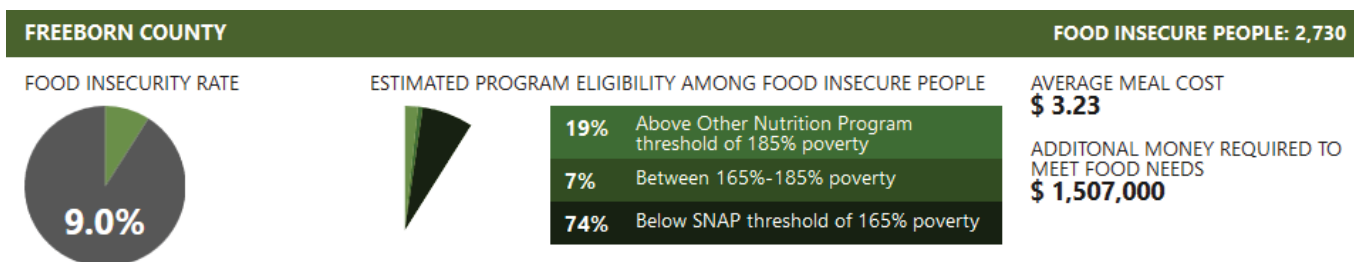
## Local Food and Agriculture

### Strategies Supporting Sector Goals

As indicated in the introduction, the Climate Action Plan is intended to be a 9 year plan to be updated at the completion of that time. Consequently, the goals and strategies outlined in this section are intended to be achieved by 2030 (or earlier) unless otherwise noted.

Implementation of actions are anticipated to be initiated over 3 phases: phase 1 within 1-2 years, phase 2 within 2-7 years, and phase 3 within 4-8 years of CAP approval.

- 1 **Strategy LF-1:** Increase production of local food, particularly serving low income and food insecure individuals.
- 2 **Strategy LF-2:** Increase access to local food (potentially through the development of local Farmer's Markets, establishment of permaculture "food forests" and
- 3 **Strategy LF-3:** Reduce food waste and hunger, achieve a 30% reduction in food insecurity community-wide by 2030.
- 4 **Strategy LF-4:** Increase local agricultural resilience to climate shocks.



1

## Strategy LF 1:

Increase production of local food, particularly serving low income and food insecure individuals.

| Actions |   | Implementation Phase |
|---------|---|----------------------|
| LF-1- 1 | Establish a policy to allow city facilities to be used as Community Supported Agriculture drop off sites and promote their use among local food producers and consumers.  | 1                    |
| LF-1- 2 | Identify opportunities to revise zoning ordinances to increase allowance of urban agriculture and clarify acceptability to remove barriers to front yard and rooftop vegetable gardens, edible landscaping and foraging. Proactively promote and educate the public on urban agriculture ordinances, options and approaches.  | 1                    |
| LF-1- 3 | Support farmers to adopt flood and drought resilient agricultural practices - cover crops, for-ever green, MN soil health coalition. <a href="https://www.pca.state.mn.us/air/agriculture-and-climate-change-minnesota">https://www.pca.state.mn.us/air/agriculture-and-climate-change-minnesota</a>  | 1                    |
| LF-1- 4 | Explore potential of collaborating with low cost produce providers to establish local food markets serving low income, vulnerable, and food insecure communities while addressing retail and commercial food waste. Example: Daily Table, Boston ( <a href="https://dailytable.org/">https://dailytable.org/</a> )  | 2                    |
| LF-1- 5 | Support senior programs that involve both food and community such as volunteering or donating to local charities.   | 2                    |
| LF-1- 6 | Collaborate with Freeborn County to develop a comprehensive farmland conservation plan that prioritizes food production serving local communities while taking into consideration other City and County priorities. The plan could also include specific maps or areas prioritized for farmland conservation or identify those areas most at risk from development. Program should focus on exploring increased local food-to-table, local food utilization, and local development of cultural food products in support of Albert Lea area underserved communities. | 2                    |
| LF 1- 7 | Work with community organizations and neighborhood groups to organize a garden-tool lending program and garden bounty exchange program.   | 2                    |



## 2 Strategy LF 2: Increase access to local food.

| Actions |  | Implementation Phase |
|---------|--|----------------------|
| LF-2-1  | Coordinate with City and County GIS Mapping services to identify potential sites for community garden sites or community farm sites (similar to Dubuque Rescue Mission Community Farm <a href="http://dbqrescue.org/">http://dbqrescue.org/</a> )  | 1                    |
| LF-2-2  | Establish community gardens at under used city owned space and consider identification of additional publicly-owned sites that may be suitable for community gardens and urban farms, work with advocacy groups to make these sites available. Example: City of Burnsville "Grow Burnsville" program. ( <a href="https://burnsvillemn.gov/2271/Grow-Burnsville">https://burnsvillemn.gov/2271/Grow-Burnsville</a> )          | 1                    |
| LF-2-3  | Encourage multi-family properties developers to establish land for community gardens. Explore potentials for incentives for property owners.   | 1                    |
| LF-2-4  | Establish a policy to serve local food at all City events. Encourage Freeborn County and Albert Lea Area Schools to establish similar policies.  | 1                    |
| LF-2-5  | Use permaculture (examining and following nature's patterns) in landscaping. Explore opportunities for permaculture and "Food Forest" pilot projects using City land or Right of Way areas, prioritizing locations that can best serve food insecure individuals. Example: City of Burnsville "Grow Burnsville" program. <a href="https://burnsvillemn.gov/2271/Grow-Burnsville">burnsvillemn.gov/2271/Grow-Burnsville</a> ) | 2                    |
| LF-2-6  | Expand Farmers Markets, local food hubs and marketing of locally produced and processed foods. Program to focus on increased community equity and food security among at-risk populations  | 2                    |

3

## Strategy LF 3:

Reduce food waste and hunger, achieve a 30% reduction in food insecurity community-wide by 2030.

| Actions |   | Implementation Phase |
|---------|---|----------------------|
| LF-3-1  | Work with Freeborn County to conduct a detailed Food Security Assessment to determine food insecurity conditions within the City, areas with limited access to full service grocery stores and markets (particularly within areas of higher vulnerable populations), particularly areas which overlap low income and vulnerable populations. Identify areas within the City for improvement, and establish detailed strategies to increase food security within City. | 1                    |
| LF-3-2  | Learn from the increased demand for Ruby's Pantry with long lines during the pandemic, to find out what was causing the increased demand and how to address the economic stability  | 1                    |
| LF-3-3  | Collaborate with convenience stores located within food insecure areas identified in the Food Security Assessment to incentivize the purchase and distribution of affordable, fresh, and locally grown foods.   | 1                    |
| LF-3-4  | Attract and promote grocery store and food market investment in food desert sections of the City. Explore successful strategies used in other communities to attract grocery stores into food desert locations and implement best practices. Collaborate with neighboring communities to maximize coverage.   | 2                    |
| LF-3-5  | Explore development of a mobile food pantry with a focus on local, organic, and whole foods to increase access to high quality nutrition in underserved areas of City. Explore potential partnerships for operation and maintenance of mobile food pantry program.  | 2                    |



## 4 Strategy LF 4: Increase local agricultural resilience to climate shocks.

| Actions  | Implementation<br>Phase |
|--|-------------------------|
| LF-4-1 Collaborate with Freeborn County, University of Minnesota Extension, Minnesota Farmer's Association, and local organic farmers associations to encourage adoption of strategies to increase soil health and increased carbon sequestration for Croplands and Grazing Lands. Tools: <a href="http://www.comet-farm.com/">http://www.comet-farm.com/</a> GHG and Carbon Sequestration Ranking Tool: <a href="https://cutt.ly/Vf04djN">https://cutt.ly/Vf04djN</a>   | <b>1</b>                |
| LF-4-2 Develop and deliver educational materials for producers that will assist farms in understanding the differences between normal weather fluctuations and long term climate change, as well as provide information on the agricultural crops, varieties, and methods most suitable for our area. (cover crops and soil health)  | <b>1</b>                |
| LF-4-3 Collaborate with regional agencies, universities, and agricultural interests to identify potential impacts of ozone on regional agriculture (both current and projected future impacts based on climate change). Identify strategies to address impacts.  | <b>2</b>                |
| LF-4-4 Develop educational materials on the relationship between nitrogen fertilizers, nitrogen monoxide emissions, and ground level ozone formation. Include strategies for minimizing and eliminating ground level ozone creation such as modified fertilizer management strategies and use of slow release fertilizers. Share and promote materials with regional farmers and agriculture associations. <a href="https://www.nature.com/articles/news050718-15">https://www.nature.com/articles/news050718-15</a> <a href="https://www.ucdavis.edu/news/smog-forming-soils/">https://www.ucdavis.edu/news/smog-forming-soils/</a> | <b>2</b>                |

### What You Can Do

You can support the goals of the Local Food and Agriculture section of the Albert Lea Climate Action Plan as an individual, household, or a business. Here are just a few things you can do:

- Rent a plot at your local community gardens and grow your own.
- Eat a plant-rich diet. Animal products are extremely GHG-intensive to produce compared to plants. Eating less meat and dairy will reduce emissions associated with food consumption. Eating regionally-grown food that is suitable for the Minnesota climate will also make a difference through reduced transportation-related emissions. A great place to start is with "Meatless Mondays" or one meat-free meal a day. <https://ourworldindata.org/food-choice-vs-eating-local>
- Buy food directly from a local grower on an ongoing basis by joining a Community Sponsored Agriculture (CSA) group or frequenting the farmer's market.
- Plant fruit or nut bearing trees or shrubs that are well suited for our hardiness zone on your property. Examples include: Trees: Apple, Pear, Plum, Black walnut, Shrub: Serviceberry, Currant.
- Support restaurants and grocery stores that use and sell locally-grown food.
- Buy food that is in season, minimizing the distance food must travel.
- Support your local farmers markets.
- Buy ethically grown and harvested food, like fair-trade coffee and chocolate.