



FOOD SYSTEMS

Food Systems

A food system includes the entire food chain from production, distribution, storage and processing, access, to waste. In addition to the impacts of climate change, Alaska's food system has unique challenges and opportunities due to geography, infrastructure, scale of agriculture and processing, population density, and reliance on imported food and products. As a result of these factors, food prices are higher in Alaska and Anchorage compared to many other places in the Lower 48. High food costs reduce food security - a basic human right.⁶¹

Historically, Alaska Native people and early homesteaders survived on a diet consisting of a variety of local foods, and incorporating Alaska Native values and traditional food practices is still a large part of the food culture in Alaska. In the early 1900's, the Matanuska-Susitna Valley had 33 dairy farms. Though many Alaskans continue subsistence and recreational harvests of game, much remains to be done to achieve greater self-reliance on the local food system. Today, Alaskans, particularly those living in urban Alaska, consume a lot of imported foods - "95% of the \$2 billion of food Alaskans purchase is imported".⁶²

Food security in Anchorage, and indeed across Alaska, is vulnerable to shifts in climate through changes to the movement and habitat of important subsistence animals and an increase in crop diseases and pests. Additionally, more extreme weather events could delay shipments of food from outside of Alaska. Climate change is also impacting local food production in the Anchorage area. An earlier spring warm up has lengthened the growing season and created new opportunities to explore fruit and vegetable species that require a longer time to grow.



Anchorage Parks and Recreation currently operates four community gardens. The Master Plan for Chanshtnu Muldoon Park includes space for 54 new garden plots, funded through an Anchorage Park Foundation challenge grant. Additional garden plots were added at the Fairview Lions Park community garden in 2018- 12 new 10'x20' plots.⁶³

⁶¹ <https://nca2014.globalchange.gov/report/sectors/indigenous-peoples#statement-16411>

⁶² Meter, Ken, Megan Phillips Goldenberg. (2014) Building Food Security in Alaska. Available at <http://www.crcworks.org/akfood.pdf>

⁶³ <https://www.muni.org/Departments/parks/Pages/MuldoonCommunityParkMasterPlan.aspx>

Incorporating the values of resilience and self-reliance into the entire food system and decreasing reliance on imported food will increase food security and promote equity in Anchorage. Indigenous ways of knowing and practices of inclusivity and community involvement should be integrated into management, research, and policy decisions throughout the food system. By integrating diverse stakeholders in food systems discussion, the Municipality of Anchorage will be able to create solutions that decrease the Municipality's food-related greenhouse gas emissions while improving food security, disaster preparedness, and equitable access to healthy food options for all Anchorage residents.

Potential solutions to decrease food-related greenhouse gas emissions and adapt to climate change impacts on the food system in Anchorage are diverse. Options include preserving agricultural land for production, raising awareness of the Alaska Grown program, developing facilities to process local food products, educating on traditional foods, and decreasing food waste.⁶⁴

Case Study: Local Food Mini-Grant Program supports community projects that increase access to local food.

In 2018, Mayor Berkowitz's office launched the Local Food Mini-Grant Program in partnership with the Alaska Food Policy Council. The program was funded by national nonprofit Cities of Service and the Alaska Department of Health and Social Services, and had a simple goal: to empower Anchorage residents to improve food security and build community resilience in their neighborhoods. The only criterion was that projects had to increase access to locally grown food and demonstrate community involvement. A total of 17 community projects, ranging from school vegetable gardens to edible landscaping, were awarded mini-grants of \$500-\$1000.



Case Study: Government Hill Commons

Land cleared for the Knik Arm Bridge in the neighborhood of Government Hill has been redeveloped as a "Commons" garden by a nonprofit and neighborhood volunteers. The Commons includes flowering apple, pear, and cherry trees, raised beds of highbush blueberries, raspberries, and other fruits, and space to host picnics and films.⁶⁵

(Photo credit: Stephanie Kesler)

⁶⁴ <https://anthc.org/what-we-do/traditional-foods-and-nutrition/>

⁶⁵ <https://www.adn.com/slideshow/alaska-news/anchorage/2017/09/09/photos-government-hill-orchard-begins-to-take-shape/>

Climate Action Plan sectors

The Anchorage Climate Action Plan puts Anchorage on a path to reduce greenhouse gas emissions 80 percent from 2008 levels by 2050, with an interim goal of 40 percent by 2030. This document details objectives and actions to achieve these emissions goals and to support resilience and preparedness for climate impacts.

Key

The objectives and associated actions are grouped into the following sectors:

- Buildings and Energy
- Land Use and Transportation
- Consumption and Solid Waste
- Health and Emergency Preparedness
- Food Systems
- Urban Forest and Watersheds
- Outreach and Education

TERMINOLOGY

“Vision” = A broad statement that describes our desired position by 2050 within each sector.

“Objectives” = Steps towards achieving mitigation targets and adaptation goals by 2030.

“Actions” = Detailed policies, projects and activities to achieve our objectives.

CO-BENEFITS refer to the intended or unintended benefits for the local environment and community as a result of mitigation and adaptation actions that are directed at addressing climate change. The co-benefits column indicates the actions that have the potential for significant, direct co-benefits. For example, actions to reduce the number of cars on the road have environmental quality and health co-benefits because these actions will improve air quality in Anchorage. The co-benefits assessed in this plan include:

- High potential to support jobs and prosperity
- High potential to advance equity
- High potential to improve local environmental quality
- High potential to improve health

PRIMARY MUNICIPAL LIAISON & POTENTIAL PARTNERS

To assist with implementation and accountability, primary municipal liaisons and potential partners are identified. For Municipality lead actions, the Primary Municipal Liaison is the primary entity responsible for initiating the implementation of the action and reporting on progress. For partner (university and other) lead actions, the Primary Municipal Liaison will be the main point of contact for the Municipality. Successful implementation will often require collaboration and coordination with other departments as well as public and private sector partners.

The full list of municipal departments included in the plan is included in the Appendix.

IMPLEMENTATION TIMEFRAME

- **Near-term** = Plan adoption to June 2020
- **Mid-term** = 2020 to 2025
- **Long-term** = 2026 and beyond
- **Existing and/or ongoing** = currently underway
- **Uncertain** = depends on funding or other factors

Food Systems

2050 Vision: Anchorage will have an ecologically, socially, and economically resilient food system, where culturally-relevant and sustainably produced and sourced foods are available to everyone.

Objective 18. Support the Alaska Grown market and enable regional food system solutions to decrease fossil fuel use.

| No. | Actions | Co-benefits | Primary Municipal Liaison | Potential Partners | Timeline |
|-----|--|---------------------|---|--|-----------|
| 18A | Conduct a regional food system assessment to understand Southcentral Alaska's food and agriculture assets and supply chain bottlenecks. Identify potential markets for Alaska Grown foods. | | Office of Economic and Community Development (OECD) | University of Alaska Anchorage (UAA), Alaska Pacific University (APU), Alaska Department of Natural Resources (AK DNR) Division of Agriculture, Alaska Native Corporations, Alaska Department of Fish & Game (ADF&G), US Department of Agriculture (USDA), Alaska Food Policy Council (AFPC), Alaska land trusts | Mid-term |
| 18B | Conduct an assessment of the Anchorage food supply to identify where our food comes from in order to set targets for Anchorage's food sourcing. | | OECD | UAA, APU, Port of Alaska, Ted Stevens Anchorage International Airport (TSAIA), Alaska Department of Military and Veterans Affairs Division of Homeland Security and Emergency Management (AK DHSEM), transportation industry, retailers, Mat-Su Valley producers | Mid-term |
| 18C | Analyze existing MOA purchasing and procurement policies and explore creating a preference for purchasing locally grown (i.e. Alaska Grown) foods. | Jobs and prosperity | Purchasing Department | Anchorage School District (ASD), Arctic Harvest Deliveries | Near-term |
| 18D | Promote and expand public education campaigns to encourage purchasing locally grown (i.e. Alaska Grown) food at the individual and institutional level. | | Office of the Mayor | AK DNR Division of Agriculture, Alaska Farmers Market Association, Alaska Seafood Marketing Institute, Alaska Marine Conservation Council, Rising Tide Communications, local media | Near-term |
| 18E | Develop more comprehensive outreach and support for individuals and entrepreneurs interested in developing new Alaska Grown and created food products. | jobs and prosperity | OECD | Anchorage Economic Development Corporation (AEDC), the Food Corridor, Charlie's Produce, ASD, Anchorage Community Land Trust (ACLT), Spork Consulting | Mid-term |

Objective 19. Support equitable access and consumption of low-carbon and local foods.

| No. | Actions | Co-benefits | Primary Municipal Liaison | Potential Partners | Timeline |
|-----|--|-------------------------------------|-----------------------------------|---|-----------|
| 19A | Identify funding mechanisms for an MOA position to coordinate and facilitate food system solutions including adaptation and mitigation of climate change impacts. Tasks include education and training for residents and businesses, building relationships between food buyers and food businesses, and coordinating other actions in this section on Food Systems. | health, equity, jobs and prosperity | Office of the Mayor | AK DNR Division of Agriculture, USDA, AEDC, AFPC, UAA, APU, private industry, and other food organizations | Uncertain |
| 19B | Expand Local Food Mini-Grant Program to support community projects that increase access to local food. | health, equity | Office of the Mayor | AK DHSS, AFPC, UAA, APU, ACLT, FCC, nonprofits | Near-term |
| 19C | Encourage and incentivize farmers markets to accept payment through food assistance programs, including SNAP, WIC, WIC FMNP, and Seniors FMNP. | health, equity, jobs and prosperity | AHD (Anchorage Health Department) | Alaska Farmers Market Association | Near-term |
| 19D | Continue to develop edible landscaping in the MOA Horticulture program and tie current and future edible landscape initiatives together to educate residents about these local food resources and to showcase the variety of plants that can grow in Anchorage | health, equity | Parks and Recreation (P&R) | UAF Cooperative Extension, Food Bank of Alaska, AFPC, Alaska Master Gardeners | Near-term |
| 19E | Support existing school and community gardens and provide opportunities to expand community growing spaces with a focus on youth and low-income residents. | health, equity | P&R | Anchorage School Garden Network, UAA, APU, Alaska Master Gardeners, UAF Cooperative Extension, Alaska Botanical Garden | Near-term |
| 19F | Support produce prescription programs in partnership with hospitals, clinics, and local food assistance providers. | health, equity | AHD | Hospitals, clinics, other health care providers, grocery stores, farmers markets, Food Bank of Alaska, health insurance companies | Mid-term |
| 19G | Develop education strategies for teaching Anchorage residents about growing, harvesting, cooking, and processing local agricultural goods and subsistence resources in neighborhoods most at risk of food insecurity (supports Health and Emergency Preparedness Action 15C) | health, equity | P&R | UAF Cooperative Extension, Food Bank of Alaska, Alaska Master Gardeners | Mid-term |
| 19H | Support efforts to identify and increase utilization of shared food system assets such as shared food storage space, community commercial kitchens, and group purchasing of growing equipment such as backyard greenhouses or hoop houses. | health, equity | OECD | AK Department of Environmental Conservation (AK DEC), the Food Corridor, AEDC, ASD, ACLT, Charlie's Produce | Mid-term |

| 19I | Develop a framework for assessing what it means to have a "low carbon diet" in the context of an Alaskan diet that includes wild fish and game. | | Office of the Mayor | UAA, APU, AHD | Mid-term |
|---|---|-------------|-----------------------------|--|-------------|
| Objective 20. Reduce and repurpose food waste. | | | | | |
| No. | Actions | Co-benefits | Primary Municipal Liaison | Potential Partners | Timeline |
| 20A | Increase composting through expanding the curbside composting pilot program, community composting, and education programs on the importance of reducing waste and benefits of composting and how to compost and how to use compost (See Consumption and Solid Waste Action 10D). | environment | Solid Waste Services (SWS) | Compost end users (i.e. agriculture sector, landscapers) | In progress |
| 20B | Conduct an organics waste collection pilot project with a sample of Anchorage businesses to test the interest, methodology, and amount of commercial food waste that would need to be accommodated by a commercial organics collection program. Explore possible incentives for food retailers and restaurants to participate in food waste reuse and recycling programs. | environment | SWS | ASD, JBER, TSAIA, hospitals, universities, food retailers, restaurants | Mid-term |
| 20C | Revise the Anchorage Food Code to allow people to use personal containers for prepared food take-out. | | Anchorage Health Department | Alaska Cabaret, Hotel, Restaurant, and Retailers Association (CHARR) | Mid-term |