



## Fairbanks North Star Borough

# Comprehensive Economic Development Strategy (CEDS) Update

### **IMPLAN Analysis: Cooperative Food Processing Center**

*An economic impact analysis of constructing a year-round cooperative food processing center and storage facility in Fairbanks.*

Prepared for the Fairbanks North Star Borough

by Northern Economics and Agnew::Beck Consulting



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## Key Takeaways

The proposed project involves building and operating a year-round cooperative food processing center and storage facility in Fairbanks. *The Island: A Decentralized Cooperative Food Production, Processing, Storage, and Education Facility* is envisioned to provide year-round infrastructure and additional support services for the local food sector and is also a key strategy in addressing food security challenges in the region.

The facility is estimated to be a \$950,000 capital investment with modest operational and maintenance costs of approximately \$150,000 per year. This investment is projected to generate the following near-term and long-term economic benefits:

- In the near term, the construction of the proposed facility is projected to support nine jobs, contribute \$520,000 in total labor income, and generate \$1.04 million in total business sales in the region.
- In the long term, year-round operations and maintenance of the facility will generate \$440,000 in total business sales, nine long-term jobs (direct, indirect, and induced), and \$256,000 in total labor income.
- Finally, the proposed project would extend and increase the production and consumption of locally grown food in the Fairbanks North Star Borough. Extending the growing season and increasing the availability of locally grown food would generate more revenues for local growers, processors, and sellers. The year-round operations of the proposed new facility will increase food security, access to healthy foods, and generate additional economic activity in the region.

## Project Description

Increasing food security is an important issue in the Fairbanks region given that over 90 percent of the food consumed locally is imported (FEDC 2022). Addressing food security was one of the key objectives under the Agriculture Action Plan in the FNSB Comprehensive Economic Development Strategy (CEDS) (FNSB 2022). The CEDS identified establishing a community cooperative food processing center and storage facility as a priority economic development strategy to support the local agricultural sector and address food security by increasing production, distribution, processing, and storage of locally grown products.

The proposed project involves the construction and operations of a cooperative food processing center and storage facility in Fairbanks. The full project name is *The Island: A Decentralized Cooperative Food Production, Processing, Storage, and Education Facility in Interior Alaska* (Chaga Co-operative 2022). The facility is intended to be a year-round indoor operation for growing leafy greens and mushrooms, with additional services that would help sustain the local food system. Specifically, the proposed infrastructure will have the ability to support the following services:

- Food production
- Community food processing in a Department of Environmental Conservation (DEC) certified kitchen
- Local food purchasing and aggregation for larger markets
- Food storage
- Marketing services for small food producers

- Education in partnership with Fairbanks Soil and Water Conservation District's Alternative Fairbanks Farm and Educational and Cooperative Training (AFFECT) project

The proposed project is estimated to require a \$950,000 capital investment. This relatively modest investment is anticipated to generate both near-term and long-term economic benefits in the Fairbanks region not only by generating jobs and income associated with the construction and operations of the facility but also by bolstering the local agriculture industry/food sector and benefitting local customers.

## Near-Term Economic Benefits of the Construction Project

The proposed *Cooperative Food Processing Center and Storage Facility* will create a short-term economic stimulus in the Fairbanks North Star Borough during the construction phase of the project. During this phase, local spending associated with the construction activities will benefit businesses across various economic sectors in the region including companies involved in construction and logistics, building services, greenhouse and nursery production, and other businesses that supply goods and services to these companies and their workers. Local contractors are anticipated to work on the construction project. Note, however, that not all capital costs would be spent locally as some of the materials and equipment are not available locally and will be imported from outside the region. Approximately 28 percent of the total capital costs are anticipated to be sourced from outside the region (Chaga Co-operative 2022).

The economic stimulus from direct local construction spending is projected to generate about \$1.04 million in total economic output or local business sales. Construction activities are estimated to support up to nine total short-term and temporary jobs (direct, indirect, and induced) in the region over the course of the construction phase. These short-term construction phase jobs will generate about \$520,000 in labor income.

The proposed construction project's estimated economic impacts are summarized in the table below.

**Table 1. Projected Economic Benefits of the Construction of the Proposed Cooperative Food Processing Center and Storage Facility**

Indicator	Direct <sup>1</sup>	Indirect <sup>2</sup>	Induced <sup>3</sup>	Total
Economic Output/Business Sales	\$685,000	\$108,000	\$251,000	\$1,044,000
Employment (# of Jobs)	6	1	2	9
Labor Income	\$414,000	\$29,000	\$77,000	\$520,000

*Source: Northern Economics estimates based on construction cost estimates provided by the project proponent and the IMPLAN<sup>4</sup> input-output model for the Fairbanks North Star Borough.*

<sup>1</sup> Direct effects refer to the new economic activity that can be tied directly to the proposed project. In this table, direct effects include spending for construction of the facility and the direct jobs and labor income associated with the construction activities.

<sup>2</sup> Indirect effects are those associated with a change in economic activity due to spending for goods and services tied to the new facility. During construction, these are the changes in the local economy occurring because construction firms purchase goods (e.g., cement, wood, and nails) and related services (e.g., landscaping, accounting, and legal). As construction firms make purchases, this creates an increase in purchases across the supply chain.

<sup>3</sup> Induced effects are those associated with a change in economic activity due to spending by the employees of businesses (labor) and by households. These are economic changes related to spending by people directly employed to construct the facility. Once operations begin, spending by employees of the facility will drive induced effects. Induced effects also include household spending related to indirect effects.

<sup>4</sup> IMPLAN is a predictive input-output model of local/regional economies and is widely used to measure the economic impact of industries and industrial/commercial development. IMPLAN uses borough level employment and payroll data to define linkages between industries in the local economy and multipliers that predict the total impact of an economic stimulus.

## Operations Phase and Long-Term Economic Benefits of the Facility

The new infrastructure is designed to be a 6,000 square foot facility with 2,000 square feet of dedicated space for food production/hydroponics, kitchen, and storage operations. The maintenance of the infrastructure, which is estimated to cost about \$150,000 per year, is expected to create additional economic activity in the region. The year-round operations of the activities and programs occurring at the facility will include the *incubator kitchen*, which is anticipated to support the operations of 25 producers and also host educational programs through the partnership with Fairbanks Soil and Water Conservation; the *food hub*, which will be a dedicated space for aggregating local produce, pickups of CSA boxes, processing hydroponic orders, and a centralized area for other facility events; and the *food production/ hydroponics* facility, which is where the produce will be grown year-round. These programs, in addition to the maintenance of the facility itself, will also support additional jobs and generate more economic activity in the region. It is estimated that these operations will support three full-time staff and one part-time (seasonal) position. These jobs will be in sectors that provide facility maintenance, utilities, insurance, and other business services. Given the facility's year-round operations, these workers will benefit from long-term, year-round employment and generate additional income in the region. The estimated annual economic benefits of the proposed project during its operations phase are provided in Table 2 below.

**Table 2. Projected Annual Economic Benefits of the Operations and Maintenance of the Proposed Cooperative Food Processing Center and Storage Facility**

Indicator	Direct	Indirect	Induced	Total
<b>Economic Output/Business Sales</b>	\$258,000	\$125,000	\$57,000	\$440,000
<b>Employment (# of Jobs)</b>	5	2	2	9
<b>Labor Income</b>	\$164,000	\$50,000	\$42,000	\$256,000

*Source: Northern Economics estimates based on cost estimates provided by the project proponent and the IMPLAN input-output model for the Fairbanks North Star Borough.*

By supplying low-cost, centralized access to an incubator kitchen and a processing/storage space, the cooperative center will also better enable new and expanding agriculture and food-related businesses to grow and thrive. The facility will therefore act as a catalyst for even greater economic benefit to the community through the successes of the members and participants who use from the space. As the center comes to fruition, we recommend identifying specific metrics to track the success of members and entrepreneurs who are using the center, such as business profitability and growth over time, to evaluate and track the full financial impact of the center. The specific financial impacts will vary based on the final composition of programs and services offered in the facility, and the unique characteristics of the members who ultimately use the space (e.g., bakers, caterers, farmers, CSA distributors, etc.).

Beyond the jobs and income associated with the new facility, the Fairbanks agricultural sector and residents would benefit from the continuous year-round business and availability of locally grown produce in the region. Extending the growing season and increasing the availability of locally grown food would generate more revenues for the local food industry (including growers, processors, and sellers). The year-round operations of the proposed new facility will increase food security and generate additional economic activity in the region.

## References

Chaga Co-operative (Project Proponent). 2022. Description of the proposed project and estimated capital and operating costs. Data provided to Northern Economics via e-mail message forwarded by Molly Mylius (Agnew::Beck) on September 27, 2022.

Fairbanks Economic Development Corporation (FEDC), 2022. Description of Agriculture Projects. Available at <https://www.investfairbanks.com/agriculture/>.

Fairbanks North Star Borough (FNSB). 2022. Agriculture sector objectives and strategy stated in the Fairbanks North Star Borough Comprehensive Economic Development Strategy (CEDS) 2022-2027. Available at [https://fnsbceds.com/wp-content/uploads/2022/06/06-20-22-FNSB-CEDS\\_AgricultureSummary.pdf](https://fnsbceds.com/wp-content/uploads/2022/06/06-20-22-FNSB-CEDS_AgricultureSummary.pdf).

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