

KAPA Brief

updated June 2023

Prepared by



Prepared for





A NOTE FROM FOOD WORKS GROUP

It has been a pleasure and a privilege to engage with KAPA and utilize our expertise for this important work. It is our sincere hope that our recommendations will have a positive impact on Ketchikan and the larger regional ecosystem for many years to come.

We are grateful to the many organizations, business owners, and community members who have generously offered their time and insights, which were critical to the accuracy and richness of this work.

A sincere thank you to our collaborators at KAPA for their partnership and invaluable contributions to this project. Their expertise provided the context and details needed to create a solid framework for this research.

Finally, thank you to the support of the FWG team who brought their energy and insights to this work.

The FWG Team



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INTRODUCTION AND BACKGROUND

Food Works Group (FWG) contracted with Ketchikan Agricultural Producers Association (KAPA) to conduct a feasibility study to determine the need for and economic viability of a Food Hub to service the Ketchikan community. Additionally, this work assessed supporting the needs of the Prince of Wales and Metlakatla communities. For phase 1 of this work, FWG was charged with formulating recommendations for the facility's core competencies and identifying how potential users might engage with the facility. Per our memorandum of understanding (MOU), FWG has:

- Engaged with the local food community to garner a better understanding of specific, unique needs that a Ketchikan Agricultural Producers Association (KAPA) multipurpose food facility located in Ketchikan will address, such as warehousing, value-added processing, and freight consolidation services for inbound and outbound product.
- Assessed local and regional produce supply (via KAPA growers and other partners/suppliers) to gauge quantity and quality of produce items for various B2B channels (restaurant groups, institutions, nonprofits); reviewed diversity of crops as well as newer growing methods, e.g. hydroponics, to support cultivation of additional crops.
- Assessed additional aggregation and distribution issues (beyond freight consolidation), competition issues, standardization of product, and other logistical barriers to success, with special attention paid to the challenges associated with these isolated island communities.
- Interviewed key community organizations as well as a diverse sampling of potential customers and other stakeholders to refine specific needs; created a map of relevant food ecosystem partners for collaboration.

VISION & GOALS

KAPA was formed to create food security and economic opportunity for the Ketchikan community. The vision for this work is to centralize and provide access to the resources necessary to support agricultural producers growing, processing, selling, and marketing their products.

A KAPA Food Hub will be the nexus of this vision. This hub has the potential to improve access to and quality of food production, address key infrastructure gaps in the supply chain, and generate efficiencies, all of which will create opportunities to bolster the regional food system, support food security, and foster economic development in Ketchikan and the surrounding region.

METHODOLOGY

FWG began our research by conducting an extensive [literature review](#). FWG relied on KAPA's leadership to provide documents on projects to date in Southeast Alaska, Alaska Food Policy Council (FPC) research, and any other pertinent literature related to this project.

The bulk of FWG's phase 1 work was to lead in-depth interviews with key stakeholders from the region. FWG worked collaboratively with KAPA leadership to craft a targeted list of interviewees that represented key perspectives and varying experiences. Approximately 40 interviews were conducted with individuals and organizations representing local government, indigenous communities, logistics/transportation needs, processing, mariculture, traditional and nontraditional growers, farmers markets, grocery stores, hunger-relief, community organizers, nonprofits, and more.

Throughout our interviews, FWG strived for candor and transparency, allowing space for interviewees to share honest opinions and past experiences that provided valuable context. Through that process, we were able to unearth common themes to inform our recommendations, and discern core competencies for the facility. The information FWG gleaned from in-person and virtual interviews, face-to-face meetings, and site visits informed the content and recommendations charted and visualized below, and their reflections and recommendations are woven throughout the report as appropriate anecdotes, data and statistics, and key insights.

The discovery phase of this project is now complete. Through our canvassing of this wide swath of stakeholders, as well as desktop research and an extensive literature review, we have developed the next section, entitled *State of the Region*. This section provides necessary context and includes our analysis of existing and needed facilities/core competencies, programs, and services to support the region's food ecosystem.

STATE OF THE REGION: SOUTHEAST ALASKA

History & Context

Alaska is rich in terms of both its abundant natural food sources and deep cultural knowledge of traditional foodways. Farming, foraging, fishing, and hunting have sustained Alaska's many remote and rural communities for centuries.

Alaska's vast resources brought Russian traders and then European settlers to the territory. In order to become established, settler communities depended on local food production. Between 1898-1917 the US government established seven agriculture experiment stations throughout the territory. Agricultural development in Alaska peaked with the "booms" of resource rushes (primarily gold and oil), as local food production was essential to support population growth. Subsequent "busts" and the federal government's withdrawal of funding support for agriculture in the region left the state's infrastructure for food production unstable and sparse. Transportation infrastructure was built for trade and resource export, with food distribution as an afterthought.¹

Thus, through the last 300 years of European colonization, population growth, and industrial development, Alaska's dominant food system has flipped to rely almost entirely on imports from the lower 48 and internationally.

Today, an estimated 95% of food in Alaska is imported from out-of-state.² For example, seafood is one of the largest industries in the state, but the vast majority of seafood caught in Alaska is exported to be processed and consumed.³ The infrastructure and economy have been built to support a largely unsustainable and vulnerable food system for the local communities, leaving approximately 1 in 9 Alaskans food insecure.⁴

The area of focus in this research to assess the proposed KAPA Food Hub is in and around the town of Ketchikan in Southeast Alaska, including Prince of Wales communities and the Metlakatla Indian Community. These communities' food systems mirror Southeast Alaskan island issues and many statewide issues around food production, transportation, and infrastructure.

¹ AFES - Agriculture and Forestry Experimental Station, Univ of Alaska Fairbanks. (1998). [*Agroborealis*](https://scholarworks.alaska.edu/handle/11122/1595). <https://scholarworks.alaska.edu/handle/11122/1595>

² Meter, K., & M. P. Goldenberg. (2014). [*Building Food Security in Alaska*](https://www.crcworks.org/akfood.pdf). <https://www.crcworks.org/akfood.pdf>

³ McDowell Group. (2017). [*The Economic Value of Alaska's Seafood Industry*](#). Alaska Seafood Marketing Institute.

⁴ Feeding America. (2020). [*Get the facts about hunger in Alaska*](#). Map the Meal Gap. <https://www.feedingamerica.org/hunger-in-america/alaska#>

Ketchikan, Alaska is located at the southernmost tip of the state. The town supports the population of the Ketchikan Gateway Borough, just over 13,700⁵, with supplies and groceries. This region of Southeast Alaska is characterized by its thousands of islands cut by fjords and interlocking waterways.⁶ These waterways make up the Inside Passage, a key Pacific trade route. Most land in the region is characterized by steep, rocky terrain. Ketchikan has a mild maritime climate and is one of the rainiest cities in the US with an average of 153 inches of rainfall each year.⁷ Ketchikan is flanked by Prince of Wales Island (POW) to the northwest, the Misty Fjords National Monument and British Columbia to the east, and the Tongass National Forest to the north.

Humans have lived in Southeast Alaska for millennia. The Tongass and Cape Fox Tlingit, and later Haida and Tsimshian people, occupied seasonal and permanent settlements in the region before European colonization began, and continue to live throughout the region today, particularly in Ketchikan, Saxman, Kasaan, Klawock, Craig, and Hydaburg. The Organized Village of Kasaan is a federally recognized tribe. Though small and remote, this village is one of the few remaining communities of Haida people.

Plentiful salmon run in waterways like the Ketchikan Creek and are central to Native life in the region. According to the Ketchikan Story Project, Native Tlingit people set up a seasonal fish camp in modern-day Ketchikan: “In just a few weeks, Tlingit fishermen would catch most of the fish they needed for the year.”⁸ The name Ketchikan is an anglicized form of a Tlingit word Kichxáan first used to refer to the creek that runs through the town.⁹

As European colonizers arrived, they valued the town’s location and resources as a port city for trade. Through the 19th and mid-20th centuries, Ketchikan’s commercial industries of mining, fishing, timber, and finally tourism developed as more non-Natives moved to the area. Nowadays, Ketchikan and neighboring towns have booming commercial seafood industries.

Ketchikan’s estimated 2021 population is predominantly white with a significant Native population (17%), as well as residents identifying as Asian (12%), Hispanic or Latino (6%), Two or More Races (9.6%), Black (0.9%), and Pacific Islander (0.2%).⁵

⁵ US Census Bureau. (2021). *QuickFacts: Ketchikan Gateway Borough, Alaska*.

<https://www.census.gov/quickfacts/ketchikangatewayboroughalaska>

⁶ Tierney, L., & M. Smith. (2016). *Ecological Atlas of Southeast Alaska*.

https://ak.audubon.org/sites/default/files/seak_atlas_ch02_physical_setting_200dpi.pdf

⁷ Western Regional Climate Center. (2016). *Period of Record Monthly Climate Summary: Ketchikan INTL AP, Alaska*. <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ak4590>

⁸ Ketchikan Visitors Bureau. (2016). *Ketchikan Stories Project*.

<http://ketchikanstories.com/film/a-true-frontier/history-1>

⁹ Atkinson, E. (2017). *Ketchikan Uncovered: the elusive history of the First City's name*. KRBD.

<https://www.krbd.org/2017/07/07/ketchikan-uncovered-elusive-history-first-citys-name/>



Native and non-native people alike still practice the subsistence hunting, foraging, fishing, and farming traditions central to survival and culture in Southeast Alaska.¹⁰ However, rights around land use and natural resources restrict subsistence harvesting, especially in more urban areas. Native communities are advocating for food sovereignty to practice the food traditions that first existed here and sustained tribes for thousands of years.^{11,12}

Infrastructure & Land

Land Access

Southeast Alaska is vast and sparsely populated, but harsh topography and preserved lands decrease the availability of workable farmland. In addition, “poorly developed natural mineral soil”¹³ limits agricultural development and requires greater upfront expenses to develop traditional farmland. Solutions for building soil include composting systems to turn local food waste into compost to enrich and amend existing soil, as opposed to importing soil from elsewhere (which is costly and can introduce non-native organisms).

Access to land for seasonal foraging, hunting, and fishing is complex due to the patchwork of land ownership and restrictions. Indigenous people are fighting for the right to access land to harvest traditional foods.¹²

Seafood Industry

The Alaska seafood industry accounts for over half of the total seafood harvest in the United States. In 2019, Alaska landed 5.7 billion pounds of seafood (\$2.0 billion value).¹⁴ While the backbone of this industry is small, commercial fishing boats, and seafood processing and distribution have conglomerated into large companies with economies of scale to handle product volumes.

¹⁰ Heifetz, L. (2013). *Southeast Alaska Food Systems Assessment*.
https://www.seconference.org/sites/default/files/FoodAssess_3.0_email.pdf

¹¹ Simpson, B. (2022). *Alaska's herring row*. Food & Environment Reporting Network (FERN).
<https://thefern.org/2022/08/alaskas-herring-row/>

¹² Stone, E. (2022) *Ketchikan Indian Community's new president says she'll push for greater access to traditional foods*. KRBD.
<https://www.ktoo.org/2022/01/28/ketchikan-indian-communitys-new-president-says-shell-push-for-greater-access-to-traditional-foods/>

¹³ Gorman, R. (2013). *Gardening in Southeast Alaska*. University of Alaska Fairbanks Cooperative Extension Service.
https://juneaucommunitygarden.org/wp-content/uploads/2016/01/Gardening_in_Southeast_Alaska.pdf

¹⁴ McKinley Research Group. (2022). *The Economic Value of Alaska's Seafood Industry*.
https://www.mcdowellgroup.net/wp-content/uploads/2022/05/mrg_asmi-economic-impacts-report_final.pdf

A report on Alaska's seafood industry summarizes the range of boats and crews:

*The scale of commercial fishing activity in Alaska is very diverse. Crews range from one or two fishermen working from skiffs and small boats to large catcher processors in excess of 300 feet with 100 workers or more.*¹⁴

The industry includes independent commercial fishing boats as well as fishing for subsistence or recreation. Gathering seafood is more than an economic driver – it is directly rooted in the culture of people who have been harvesting food for hundreds of years in Alaska.

Southeast Alaska is home to “nearly a third of Alaska’s commercial fishing fleet”¹⁴ and seafood accounts for 15% of the region’s employment. In 2020, 20.7 million pounds (\$15.9 million value) of seafood came into the Port of Ketchikan.¹⁵ The Ketchikan Gateway Borough had six active seafood processing facilities in 2020.¹⁵ In Southeast Alaska, salmon harvest is particularly popular both in terms of commercial production and cultural significance. In 2019, salmon accounted for 70% of the seafood production value in the region.¹⁴

Despite this robust industry, it can be difficult to purchase Alaskan-caught seafood in the state. Most commercially caught seafood is sent to larger facilities in Seattle for processing, and then sold outside of Alaska. A small percentage is shipped back for Alaska consumers.²

Great opportunity lies in diverting fish landings from independent fishermen to local communities to increase food access. This solution would rely on a partnership with a local fish processor or building smaller-scale fish processing infrastructure to accommodate local consumption at a reasonable price.

While fish dominate the industrial seafood scene, mariculture and traditional gathering of a variety of organisms such as kelp and shellfish are also important local food sources. Examples of successful mariculture-based businesses in Ketchikan include: [Foraged & Found](#), [Hump Island Oyster Co.](#), and [OceansAlaska](#).

¹⁵ United Fishermen of Alaska. (2020). [2020 Commercial Fishing and Seafood Processing Facts: Ketchikan Gateway Borough](https://www.ufafish.org/wp-content/uploads/2022/05/20.-Ketchikan-Gateway-Borough-2020-v1.0-final.pdf).
<https://www.ufafish.org/wp-content/uploads/2022/05/20.-Ketchikan-Gateway-Borough-2020-v1.0-final.pdf>

Food Production

Apart from the commercial seafood industry, local food production in the region is primarily via small-scale and subsistence farming, foraging, and hunting. The area lacks robust infrastructure to make, process, store, and transport food for local consumption or commercial production. Many households are engaged in subsistence farming to grow their own produce, but a 2017 report estimated only thirty active commercial produce growers in Southeast Alaska (the region ranging from Skagway down to Metlakatla).¹⁶

A study of local produce demand in Juneau found that demand exceeded supply for nearly all fresh produce items.¹⁷ The report identified crops with the most revenue potential: chard, kale, rhubarb, squash, salad turnips, kohlrabi, lettuce, garlic, and carrots. In addition, it identified herbs, lettuce, and specialty crops (unique or of regional significance) as particularly promising for wholesaling. In order to meet demand, the authors recommended technical assistance for local farmers on pricing, standardization, and communication with wholesale customers. With about three times the population of the Ketchikan area, Juneau is not a perfect proxy here. However, this research provides a starting point for expanding vegetable production near Ketchikan.

A Southeast Alaska Food Systems Assessment identified the following challenges:

*Weaknesses of the current cultivation system include the lack of communication, collaboration, and networking among food producers, a lack of facilities to process foods for value-added products and limited distribution options. A relatively small proportion of the total food available in communities is locally produced and finding affordable labor is problematic.*¹⁰

Shared infrastructure and coordination is needed to support small farmers and food production businesses to scale. The Alaska Food Policy Council (AFPC) has recommended the development of “food production nodes” throughout the state, envisioned as shared infrastructure with “local level washing, packing, storage, and distribution”.² Through a 2020 USDA Regional Food Systems Partnership grant, the AFPC developed a statewide network of 13 regional “nodes” via existing host organizations. With leaders from each node, AFPC conducted network facilitation, asset-mapping, and a needs assessment. The collaboration resulted in a statewide food security action plan which included a goal of

¹⁶ McDowell Group. (2017). [Current and Potential Economic Impacts of Locally-Grown Produce in Southeast Alaska](https://www.mcdowellgroup.net/wp-content/uploads/2017/09/local-produce-economic-impacts-final.pdf).

<https://www.mcdowellgroup.net/wp-content/uploads/2017/09/local-produce-economic-impacts-final.pdf>

¹⁷ McDowell Group (2017). [Juneau Area Local Produce Demand Analysis](https://www.mcdowellgroup.net/wp-content/uploads/2017/09/local-produce-demand-analysis.pdf).

<https://www.mcdowellgroup.net/wp-content/uploads/2017/09/local-produce-demand-analysis.pdf>

increasing food system infrastructure.¹⁸ Specific actionable next steps for the new Alaska Food Systems Network are still in development; the AFPC is pursuing a USDA Regional Food Partnership Implementation grant to support this work.¹⁵



Alaska Food Policy Council's "Alaska Food Security Action Plan" emerged from the statewide workshops and asset-mapping with food production node leaders.¹⁸

Southeast Alaska was represented by a node in "Annette Island, Prince of Wales island, Ketchikan and neighboring communities," with both KAPA and the Ketchikan Indian Community as key partners.¹⁸

Food Processing

Processing facilities allow food businesses to create value-added products with greater profit margins and longer shelf life, extend the season of local food, and reduce food waste.¹⁰ Building and maintaining such facilities with food safety standards and requirements for wholesale commercial sales is expensive. Managed shared-use facilities can efficiently serve many producers at once. The Southeast Alaska Food System Assessment recommended a food hub facility including shared value-added processing, distribution, and marketing services. The assessment also recommended equipment-sharing and a buyer cooperative for "bulk purchase of supplies, soil amendments, and ingredients for value-added products" in order to get better bulk pricing and share costs of shipping and transportation.¹⁰

¹⁸ Alaska Food Policy Council. (2022). *Food Security Action Plan: 2022 Alaska Food Policy & Beyond. Growing Connections and Networks for Greater Food Security.*

The [Salt & Soil Marketplace](#) is an example of a successful co-located aggregation facility for a group of local food producers in Southeast Alaska. A program of Ecotrust, Salt & Soil aggregates local food for direct consumer and wholesale purchasing for distribution in Juneau.¹⁹ The marketplace supports smaller producers in the region via low-barrier access to consumers. Primary products for sale through the marketplace are fish, foraged produce, value-add seafood (dried kelp, smoked fish and shellfish), locally made baked goods and pasta, and other locally made value-add products (spice, tea and salt blends; sauces, jelly, and preserves; vinegars; and tinctures).

Storage & Aggregation

Short- and long-term cold storage allows for local products to be harvested at peak and used throughout the year. Recommendations from a transportation report by the Southeast Alaska Watershed Coalition include (1) bringing producers together to store produce in Juneau in existing cold storage facilities over the winter and (2) to develop efficient shared cold storage such as root cellars.²⁰ While root cellars are not ideal for all products, farms could be encouraged to grow more root vegetables and storable crops if proper affordable storage space were available. The Meyers' Farm root cellar in Bethel, Alaska could be a blueprint for additional facilities.²¹ However, the unique climate and insect pressure in Southeast Alaska may present challenges for root cellar storage; thus, modifications or other storage solutions may need to be explored.

Indigenous communities in Alaska have used traditional methods of storing foods for hundreds of years. While climate change is impacting the efficacy of these solutions, local native knowledge should be explored for food storage strategies in and around Ketchikan.

Transportation & Distribution

Infrastructure development in Alaska overall has prioritized bulk imports from the Lower 48, making those transportation channels faster and cheaper than domestic transportation routes.²⁰ Transportation options for local producers are slim and expensive. Transporting small shipments of fresh produce with short shelf-lives or specific temperature and humidity needs is a challenge.

¹⁹ Salt & Soil. (2021). [Salt & Soil Marketplace. Policies: Vendors and Members.](https://acrobat.adobe.com/link/track?uri=urn%3Aaaid%3Ascde%3AUS%3Ac698c859-c9a8-406d-94c9-7f1b6c2dfdc2&viewer%21megaVerb=group-discover)

<https://acrobat.adobe.com/link/track?uri=urn%3Aaaid%3Ascde%3AUS%3Ac698c859-c9a8-406d-94c9-7f1b6c2dfdc2&viewer%21megaVerb=group-discover>

²⁰ Peacock, C., & J. Nu. [Transportation Barriers and Recommendations.](https://static1.squarespace.com/static/584221c6725e25d0d2a19363/t/6025bafd976ccb61455f4387/1613085439283/Transportation-Whitepaper-SAWC-2020.pdf) Southeast Alaska Watershed Coalition. <https://static1.squarespace.com/static/584221c6725e25d0d2a19363/t/6025bafd976ccb61455f4387/1613085439283/Transportation-Whitepaper-SAWC-2020.pdf>

²¹ Meter, K., and M. P. Goldenberg. (2018). [Potential Infrastructure Investments for Alaska-grown Food.](https://static1.squarespace.com/static/584221c6725e25d0d2a19363/t/5ba7c7490d9297701b1219ab/1537722189757/AFPC+Potential+Infrastructure+Investments+for+Alaska+Grown+Food_.pdf) https://static1.squarespace.com/static/584221c6725e25d0d2a19363/t/5ba7c7490d9297701b1219ab/1537722189757/AFPC+Potential+Infrastructure+Investments+for+Alaska+Grown+Food_.pdf

Depending on supplies shipments by water or air is a fact of life for small island communities, but hyperlocal food production can avoid the challenges of relying on such infrastructure. [Ketchikan Ever Greens](#), sells lettuce and other leafy greens and delivers to customers in and around Ketchikan in an electric vehicle, when possible. The small business is delivering an average of 360 units of their 7 oz mixed lettuce product weekly, direct-to-consumer and wholesale.²²

Transportation infrastructure has been identified by stakeholders as a top concern for food security in this region: “The current Southeast Alaska food system is highly vulnerable because it is dependent on a lengthy supply chain that imports foods from producers and distribution centers in the Lower 48 states.”¹⁷ In a recent economic analysis of Southeast Alaska, the top “weakness” identified by 400 regional leaders was “Ferry transportation decline” and the third most cited was “Transportation costs”.²³

In Southeast Alaska, options for transporting bulk food shipments are limited to the ferry via the Alaska Marine Highway System, in air cargo, or by barge. The most economical option for produce has been the ferry, but 2019 cuts to ferry service and price hikes have quashed this option for transporting fresh produce affordably between towns. Air cargo on small planes is expensive and frequently delayed by weather conditions. However, island communities around Kodiak, Alaska (with similar challenges to the Ketchikan region) are relying on small planes to get shipments of food between villages utilizing backhaul.²⁴ Barges are the primary transport for bulk food shipments to Ketchikan and surrounding population centers. However, barges transport via large shipping containers that are only economical on a large scale, beyond the product volume produced by any one small food producer in the region. Thus, the primary food transportation options are, at best, too expensive and, at worst, nonexistent for products with a 1-2 week window of consumption at ideal storage conditions.²⁰

Communities like Ketchikan are the first to get hit by shortages and price hikes. Food security here is precarious and increasingly threatened by natural disasters and global food supply interruptions such as the COVID-19 public health emergency.

One possible solution for local food transportation is purchasing a shipping container that can be shared by multiple producers to be shipped on a barge. The shipping container could be modified especially for food storage (cold, frozen, and/or dry) to be used even when food is not being shipped, or leased out for other storage if not in use.²⁰

²² Personal Communication with Geoff Jans. (February 7th, 2023.)

²³ Rain Coast Data. (2021). [Southeast Alaska 2025 Economic Plan](https://www.seconference.org/wp-content/uploads/2021/07/Updated-CEDS-2025-March-2022.pdf?2070f3&2070f3).
<https://www.seconference.org/wp-content/uploads/2021/07/Updated-CEDS-2025-March-2022.pdf?2070f3&2070f3>

²⁴ Personal Communication with Robbie Townsend Vennel. (February 21st, 2023.)

Another option is to take advantage of backhaul opportunities with the pilot transporter network and private watercraft for local food deliveries, especially when transporting food in more remote areas and over short distances. Many vessels travel from cities to more rural areas carrying goods, but head back empty. Taking advantage of this backhaul opportunity is a win-win.²⁰

The following are examples of innovative transportation methods to get their products to market:

- Backhaul on small planes is utilized for:
 - Food transportation on Meyers' Farm in Bethel, Alaska,²¹
 - Food transportation between villages near Kodiak, Alaska.²¹
- Farragut Farm, which produces "the largest volume and value of vegetables a year in Southeast Alaska" uses a system of skiffs and catamarans to transport food from their very remote location to markets in Petersburg then along to Juneau by Alaska Airlines Cargo.²⁰
- [Ketchikan Ever Greens](#) provides local delivery of lettuce mix and greens to Ketchikan customers via electric car (Nissan Leaf) and 4x4 F-150 truck for harsher weather or less maintained roads.²²

People and Organizations

Native and Traditional Foodways

The primary form of local food production in the region is at the household subsistence level via home gardens, fishing, hunting, and foraging. Alaska subsistence food production is estimated to be worth about \$900 million annually, and to account for over 80% of diets in rural areas.² The Alaska Department of Fish and Game reported in 2017 that the majority of rural residents in Southeast Alaska participated in subsistence food production: 48% in harvesting game and 80% in harvesting fish.²⁵ Approximately 38% of Southeast Alaska's households grew food in 2016, which was slightly higher than national rates.¹⁶

Many commercial food production businesses in Southeast Alaska started as subsistence-based household operations.¹⁶ Thus, there is a good foundation for additional commercial food businesses to emerge with support and infrastructure improvements.

Native Tlingit, Haida, and Tsimshian people in this region practice and hold knowledge of traditional foodways. Examples of those practices include gatherings like the Southeast

²⁵ Alaska Department of Fish and Game. (2018). [Subsistence in Alaska: A Year 2017 Update](https://www.adfg.alaska.gov/static/home/subsistence/pdfs/subsistence_update_2017.pdf).
https://www.adfg.alaska.gov/static/home/subsistence/pdfs/subsistence_update_2017.pdf

Alaska Traditional Plants Summit and Celebration,²⁶ harvest events like the Annual Kasaan Community Harvest,²⁷ and the [Southeast Alaska Traditional Food Guide](#).²⁸

Organizations

Existing organizations form a rich bedrock of stakeholders invested in the local food system. Future work can build upon these relationships and shared knowledge. A small snapshot of such organizations follows, and additional organizations are listed in the [stakeholder matrix](#).

- [Ketchikan Agricultural Producers Association](#) (KAPA) - Formed in 2021 as a partnership to support agricultural producers in the greater Ketchikan Gateway area. KAPA is at the helm of this research into the viability of a food hub and associated infrastructure in Ketchikan, Metlakatla, and POW.
- [Alaska Food Policy Council](#) (AFPC) - Chartered in 2010 by the state government to build a more healthy, secure, self-reliant Alaskan food system via gatherings, policy initiatives, research, and assessments. The AFPC has developed a statewide network of “nodes”, or existing partner organizations working in food systems, to create an Alaska food security action plan.
- [Alaska Food Security and Independence Task Force](#) - A state government task force formed in 2022 to provide recommendations to the Governor of Alaska on goals and initiatives that promote statewide food production, storage, processing, and distribution.
- [Ketchikan Indian Community](#) (KIC) - A federally recognized tribe with a mission to serve tribal members and thus to protect and regain access to traditional, native foodways.
- [Organized Village of Kasaan](#) - A federally recognized tribe and remote Haida indigenous community on Prince of Wales island.
- [Salt & Soil Marketplace](#) - A food hub program of the Alaska Watershed Policy Council and Ecotrust. Salt & Soil aggregates local food for direct consumer and wholesale purchasing for distribution in Juneau, Haines, and Sitka.
- Organizations invested in traditional foodways include: [Kayaaní Commission of Sitka Tribe of Alaska](#), [Kodiak Archipelago Leadership Institute](#), [Southeast Alaska Regional Health Consortium](#), [Southeast Alaska Watershed Coalition](#), and [Sustainable Southeast Partnership](#).

²⁶ Yéilk', V. M. (2020). [Planet Alaska: Southeast Alaska Traditional Plants Summit and Celebration: Protecting what we love](#). Capital City Weekly.

²⁷ Goodrich, B. S. (2021). [Healing and Harvesting](#). Capital City Weekly.

²⁸ SEARHC. [Southeast Alaska Traditional Food Guide](#).

<https://searhc.org/wp-content/uploads/2021/09/Southeast-Alaska-Traditional-Foods-Guide.pdf>



Environmental & Social Context

Supply Chain Costs

Costs of materials are significantly higher in Alaska compared to the Lower 48, especially rural Alaska. Data from the Kodiak Archipelago suggests that in rural, remote Alaska groceries can cost 200% or more over the same mainland US products.²⁹ A report produced for the Alaska Food Policy Council in 2018 estimated the cost to build a food hub from scratch ranging from \$400,000 to \$600,000, and above \$1 million in more remote areas.³⁰ Estimates did not account for land acquisition or operations. With inflation and further supply chain issues since 2018, the total cost today would likely be much greater.

Being at the end of the supply chain means that investments in infrastructure and workers will be expensive in this region. On the other hand, high costs of food and the vulnerability of an import-based food system are great motivators to build a more resilient regional food system.

Local Food Economic Growth Potential

In 2014, the Alaskan Food Policy Council reported that an estimated 95% of the \$2 billion of food Alaskans purchase annually is imported.¹ Creating more opportunities for food to be produced, processed, and consumed in-state has a lot of potential for replacing this food import economy. Domestic food consumption allows those revenue dollars to be invested directly into Alaskans and Alaskan businesses.

A 2017 report identified the potential for economic growth in the food sector in Southeast Alaska, stating that, “A focus on increasing commercial growing and sales will have the largest impact on the economy.”¹⁶ The annual (2018) economic impact of commercial produce in Southeast Alaska was estimated at \$250,000 to \$300,000. The report proposes that with support for expanding commercial and household food production, this number could approach \$900,000 within a few years.¹⁶ In a recent economic analysis of Southeast Alaska, regional leaders reported the second and third greatest economic opportunities in the region as “Mariculture development” and “Seafood product development”, respectively, indicating the seafood industry as high priority for potential development for economic growth.²³

²⁹ KALI. [Kodiak geographic location and community condition \(needs\)](#)

³⁰ Meter, K., and M. P. Goldenberg. (2018). [Potential Infrastructure Investments for Alaska-grown Food.](#) https://static1.squarespace.com/static/584221c6725e25d0d2a19363/t/5ba7c7490d9297701b1219ab/1537722189757/AFPC+Potential+Infrastructure+Investments+for+Alaska+Grown+Food_.pdf

Climate

Southeast Alaskan farmers have expertise in growing produce in the mild maritime climate and microclimates throughout the region. Due to temperatures and daylight hours, the typical growing season is approximately four months in Southeast Alaska.¹³ Hydroponics systems are popular solutions for growing year-round indoors. On Prince of Wales island, schools have operated impressive greenhouses that can produce food through the winter, some utilizing hydroponics and one using aquaponics with goldfish.³¹ Aquaponics with fish for food production is illegal in Alaska, but purely ornamental fish may be used in a closed-loop system.³²

Climate change may bring a variety of impacts to Alaska's food production. On the one hand, warmer summer months allow for expanding the types and varieties of produce that can be grown there, and may increase overall yields.³³ On the other hand, changing climate exposes the region to new pests and diseases, increases the frequency of extreme weather events, and will threaten foraged and gathered food sources. Climate change will continue to disrupt the global food supply and transportation channels that currently feed the region.

Labor

Finding qualified, skilled, and affordable labor is commonly named as an issue more broadly in Southeast Alaska, which will impact growth of the food production sector. Commercial produce growers in Southeast Alaska have cited the high cost of labor as a major limiting factor to scaling up their businesses.²¹

Established Food System - Imports, Infrastructure, & Contracts

Since the food consumed in Southeast Alaska is now predominantly imported from out-of-state, physical infrastructure, policies, and contracts have been built to support this system. For instance, interstate and international shipping routes are prioritized and bolstered while local travel infrastructure is restricted (for example, ferry services from island to island in Southeast Alaska have decreased in frequency or been canceled altogether due to budget cuts²⁰). By continuing to rely on barges coming from Seattle and

³¹ Beus, C. (2017). *We Grew It! Growing in Greenhouses in the Southeast Island School District*. Alaska Master Gardener Blog.
<https://alaskamastergardener.community.uaf.edu/2017/10/24/we-grew-it-sustainable-agriculture-in-the-southeast-island-school-district/>

³² Alaska Department of Natural Resources. (2019). *Fact Sheet: Aquaponics*.
http://dnr.alaska.gov/ag/FactSheets/2015FactSheet_Aquaponics.pdf

³³ Taylor, B. (2022). *Research shows climate change may enable Alaska to grow more of its own food*.
<https://www.alaskasnewsresource.com/2022/03/31/research-shows-climate-change-may-enable-alaska-grow-more-its-own-food/>

fed by the national supply chain, broadline food distributors, national contractors, and wholesale buyers in this region are stuck spending millions of dollars on products and services from other regions.

Emergency Response & Resiliency

Alaskan national security requires resilience and redundancy built into the food supply chain, a core identified need of the Alaska Food Policy Council. A food hub facility in this region could act as a larger solution to help manage future interruptions in the food supply destined for the Ketchikan and surrounding towns, as well as the increase in demand for food assistance.

Food Sovereignty

According to the U.S. Food Sovereignty Alliance:

Food sovereignty is the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems. It puts the aspirations and needs of those who produce, distribute and consume food at the heart of food systems and policies rather than the demands of markets and corporations.³⁴

The vision of a KAPA food hub and its programming connects directly with these principles; by elevating community opinions and experiences during the design process, the resulting updates to infrastructure and the local food ecosystem at large will both cater to self-described needs of those it serves and be more resilient in the face of climate change.

Summary

The area of Southeast Alaska around Ketchikan, Metlakatla, and Prince of Wales has significant growth potential in local food production and consumption. A great foundation of local food knowledge and interest exists in this region, but the dominant structures support a heavy import- and export-based food system. One externality of this system is food insecurity on an individual and community level. Increasing food production locally will require additional infrastructure investment and regional coordination, particularly in the areas of food processing facilities, transportation, and distribution.

Innovative solutions have been piloted and suggested for food producers in this region: (1) a food hub facility with shared processing and food storage; (2) food transportation via backhaul on small planes, ferries, and recreational or personal boats; (3) food

³⁴ U.S. Food Sovereignty Alliance. [Food Sovereignty](http://usfoodsovereigntyalliance.org/what-is-food-sovereignty/).
<http://usfoodsovereigntyalliance.org/what-is-food-sovereignty/>

transportation and storage via shared modified shipping container for use on barges or as storage on land; and (4) coordinated or incentivized effort among food producers to grow storage crops that can be held in efficient, affordable, shared root cellar storage facilities.

THE BIG AHAS

This section outlines themes and learnings FWG gleaned from the approximately 40 stakeholders we interviewed, as well as from past studies that informed this project. These findings, some of which surprised FWG, while others might seem rather obvious, range from citing the critical need for food access solutions, to resilience-based practices, and under-realized opportunities for strategic partnership. The most frequently cited needs/gaps throughout interviews are as follows:

1. Food resilience is impossible without food resources

Throughout our conversations and research, the need to create additional resilience along the Southeast islands became a clear top priority. Existing producers need additional raw materials and technical assistance, new producers need a jumping off point, land and soil are scarce, as are sources of animal protein beyond small-scale chicken producers, and necessary associated services (slaughter, butchery) are virtually nonexistent regionally. FWG has identified the need for several food business support functions to help new and existing producers and processors move forward.

2. Traditional agriculture needs locally-created soil

Ketchikan, in particular, lacks rich soil for food production. Currently, farmers are bringing in soil from the Lower 48, which is both a costly endeavor and a subpar solution, as the microbial life is not native to the region.

Composting can substantially contribute to soil building from local products and divert some of the waste stream that would otherwise be shipped out by barge. A Totemic composting facility on Ketchikan could divert an estimated 10% of the food waste stream to produce around 500,000 lbs of compost. The sale of compost could provide a revenue stream for KAPA on all three island locations.

3. Alternative agriculture (including mariculture) is a viable food supply chain

This includes seaweed and kelp, hydroponically-grown lettuces, aquaponically-grown produce, wild oysters, and more. Additionally, research is currently being conducted on the viability of other products such as abalone and farmed oysters, which offer environmentally-responsible, nutritious food sources for island residents as well as Lower 48 consumers. Traditional foods for Southeast Alaska's indigenous and non-indigenous residents, if cultivated, harvested, processed, and sold wholesale for retail consumption at scale, could be a groundbreaking solution for food sovereignty and security.

4. Transportation solutions should be self-reliant

Developing a network of transportation solutions, owned and operated, or leased and outsourced, will need to be considered when budgeting capital, operating expenses, and staffing structures. However, the volatility (price and schedule) of public and commercial transport will make it difficult for business and operational planning. All potential partnerships for contracted primary routes and backhauling, combinations of barge, ferry, refrigerated box truck, or private KAPA vessel should be on the table for consideration.

5. Great potential lies in the power of capacity-building small, informal producers

Aggregation and distribution support as well as technical assistance (TA) is critical to bolster this category of producers. Whether it be growing in a temperature-controlled hoop house, hydroponic operations, scaling backyard chicken farmers, training and technical assistance, access to capital, wrap-around business support services, or aggregation and storage facilities, KAPA has the potential to be the conduit for TA services throughout the region.

6. Aggregating these (and other, established) producers under a shared KAPA brand has strong regional and national sales potential

Products produced in Alaska could be highly desirable throughout the Lower 48, especially those developed from raw materials or processes that are unique to communities in Alaska. Harvesting and processing volumes of kelp and other mariculture products could build brand recognition and meet wholesale (B2B) and retail buyer (B2C) demand locally, nationally, and internationally.

7. Labor pipeline development should be a focus of KAPA and its network of suppliers

Not enough available labor exists within communities of Southeast Alaska, forcing many businesses to bring in an outside labor force. Workforce training of locals, bringing in labor from outside the state, and building housing for staff are all necessary components of creating a more robust workforce. People focused exclusively on food access/security, supported or employed by boroughs, towns, or indigenous communities (or in partnership with KAPA with support from private philanthropy), could be plugged into multiple communities and be nimble in their support.

8. Community food system needs can be shouldered by the nonprofit to support food sovereignty, educational opportunities, and shared resources for both household subsistence and commercial production.

Community needs, especially indigenous community needs, include fractional cold storage, smokehouses, processing facility for hunted game, and shared kitchen space for value-add processing. Commercial utilization of KAPA facilities should subsidize community-facing

services and facility access for non-commercial, community-based users who rely on fractional/small-scale access to food-safe, food-grade facilities to support their families nutritionally and financially.

ECOSYSTEM

Hub & Spoke Model

Meghan Stangeland, who runs the Salt & Soil Marketplace in Juneau, echoed the interconnectedness and interdependence of all three islands, but cited that the logistical difficulties and nuances of each island will likely force KAPA to regard the development of its primary hub and spoke hubs as connected but separate projects. Because of how this statement has played out in our research, FWG advises KAPA to look at the development of the facilities and infrastructure of a “hub” on Ketchikan as its first project, to understand capacity, demand, and throughput, before advising on need, site selection and complementary facility build out on the satellite or “spoke” locations on POW and Metlakatla.

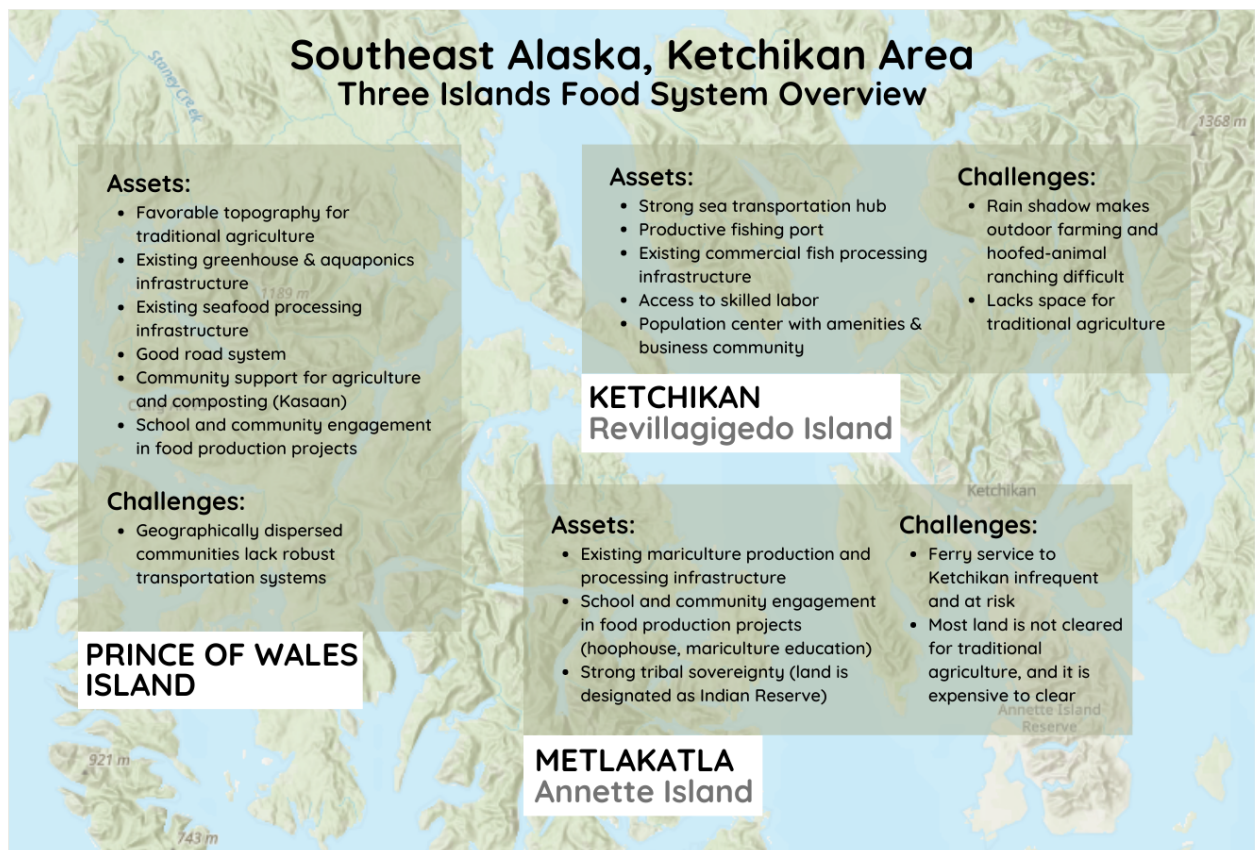
FWG will model modular dimensions for each facility function, keeping in mind the ability for financials to be scaled up or down once a site or existing facility is identified. FWG will also provide commensurate equipment costs, operating costs, projected utilities, and staffing requirements for each decided function at the two spoke locations.

In addition to a general facility diagram, a range for build-out costs, specific recommendations for large equipment and other specific facility needs, in forthcoming deliverables FWG will outline in greater detail the services, product types and volumes, and the financial plan for how the Ketchikan location can support the needs of the other islands as their spoke site facilities start to take shape.

FWG has developed a [Google Map](#) that identifies relationships between islands, opportunities for specializing functions based on environmental (terrain), transportation, and facilities factors. The maps below visualize the geography of the region, assets, and relationships between islands:



Food infrastructure the Southeast Alaska region of Ketchikan, Prince of Wales Island, and Metlakatla



Overview of strengths and weaknesses of each island in the region.

PROPOSED INFRASTRUCTURE

Facility Vision

FWG's facility vision strives to promote:

1. Increasing food security in Southeast Alaska by providing access to locally-grown and produced food through thoughtful growing, foraging, storing, aggregating, processing, and distributing;
2. The creation of a workforce to help bolster the economy and support local businesses;
3. Economic development in the region;
4. And production of food at scale so Alaska-based products can also be exported to the Lower 48.

Rose Ruel, food security specialist in Kasaan, said, "Food security means 1) the preservation of territory and resources, 2) the inclusion of different perspectives on food security, and 3) providing infrastructure that is going to work for all of the community." To this end, FWG has combined industry best practices with local research and engagement to illuminate the core functions of facilities in each of the three island communities (Ketchikan, Metlakatla, and Prince of Wales).

Location Specifications

Each community has slightly different needs and requirements of the facilities that support its KAPA-related activities. Additionally, each community's idle land and building resources vary in the footprint, amenities, and functions they can offer. Due to the importance of mariculture, fisheries resources, and other ocean-based agricultural operations, having a physical space located on water, dock access, container crane/lift functions, ample level space for enclosed storage and processing functions, and access to road transportation are just a few of the common themes required of each location. Bonus attributes would include the potential for onsite growing (container, hoop house, raised beds), staff housing, and innovative transportation solutions on- and off-island.

Functions by Location

FWG has charted the potential [KAPA Functions by Location](#) in a separate table, fleshing out each island's unique (and some not unique) needs in tandem with facility core functions to create a macro-level assessment of each island's potential facility/infrastructure needs, in tandem with cross-functional/overhead services that could be offered and supported by KAPA as an organization. Each island, Ketchikan, Metlakatla, and POW have community and environmental nuances that lead to the development of slightly different resources,

infrastructure, and services. Without clear lines of sight into where facilities would be located on each island, FWG has chosen to analyze information and provide recommendations in the following framework:

- **Location** - There will most likely be some level of facility development on each of the three primary islands in the Southeast region: Ketchikan on Revillagigedo Island, Metlakatla on Annette Island, and in Kasaan, Craig, Hollis, Klawock, or another centrally-located area on Prince of Wales Island,.
- **Core Function** - Core functions are primary uses for a facility or a significant portion of a facility for a dedicated or shared-use; the core functions outlined include: Processing (various types), Commercial Kitchen, Storage, Transportation (Aggregation & Distribution), Sales, and Cross-Functional Services.
- **Product Categories** - Product categories are outlined and speculated based on interviews and research with local producers, foragers, processors, and consumers. Product categories align with Core Functions, for example, the core function could be Processing - Mariculture, and the product categories could be Kelp (Bull, Sugar), Sea Cucumbers, Geoduck, Sea Urchin, and Oysters. Similarly, a core function could be Sales, with product categories of Retail and Wholesale, and sub categories of farm shares or bulk/cases, respectively.
- **Objective** - The Objective is the purpose of the Core Function, either operationally or strategically.
- **Key Considerations** - Key considerations highlight what FWG has observed, researched, or recommended based on past project work. These considerations can range from “need to know” to “nice to know” and would be revisited and refined during the site selection process. Many of these considerations are connected to feasibility, operations, scale of a potential site, or facilities.
- **Facilities** - Facilities is a catch-all term for anything building, infrastructure, or capital-asset related.
- **Demand** - Illustrated community needs including seasonality and specific operations or functions desired.
- **Utilization/Scale** - This column attempts to size/scope a Core Function’s Facility-related scale and utilization. Is a specific function intended for commercial-scale production and throughput volumes, or for residential or recreational use for community members or community organizations? In a few cases, a core function could service a range of users.
- **User Archetype** - User Archetype is a way of categorizing or profiling a function’s user base/community. An archetype is a description of a user type by purpose, scale, operation. Some User Archetypes could include: Local CPG (consumer packaged

goods) food business, Commercial fishery, Indigenous community hunter/forager, or Farmer/producer.

- **Revenue Potential** - Revenue potential for each Core Function is graded as low, moderate, high. These categories are not defined with a specific monetary value/range, but are rated based upon their potential to earn incremental revenue not only to cover facility operating costs, but potentially contribute to incremental operating revenue for the KAPA organization overall.

ORGANIZATIONAL STRUCTURE

The visions and ideas we heard for how this facility could best serve the community covered a vast range of functions and services. FWG's preliminary recommendations in this section balance the needs and desires expressed in interviews, viability, cost, and space.

Strategic Partnership Opportunities

FWG kept the following partnership opportunities top of mind when fleshing out core competencies section in the Functions by location section of this report, as well as the operating recommendations and strategic partnerships in upcoming deliverables:

- Ketchikan Indian Community
- Kassan Indian Community (POW)
- POW School District (school gardens)
- Metlakatla Indian Community
- Totemic composting systems
- Greenwave

Public-private partnerships will allow KAPA to leverage resources for food production, processing, distribution, and food waste management. For instance, partnering with existing fish processors in the community (Trident, AGS, EC Phillips) could result in more locally available Alaska-caught seafood with KAPA infrastructure for marketing and distribution. Partnering with Totemic on a composting facility in Ketchikan would increase KAPA's resources for obtaining affordable, local soil-building compost and capacity to manage food waste. Nonprofit [Greenwave](#) trains kelp and shellfish farmers across the U.S. with programming in Southeast Alaska. A partnership with Greenwave would help KAPA provide targeted technical assistance to the local network of mariculture producers.

Trixie Bennett, president of the Ketchikan Indian Community, food sovereignty leader for the region, and traditional foods and medicines harvester, cited the importance of fostering authentic relationships with indigenous communities, building a dialogue of trust and resource sharing that could include technical assistance for grant-writing, as well as facility access and utilization at little to no cost for services such as smokehouse access, game processing, and preservation of foraged products.

Legal Structure

KAPA can utilize its 501(c)3 status by applying for grant funding and philanthropic funds, to be used for the following:

- Hub capital expenses

- Hub and KAPA operating costs
 - Support technical assistance and programming associated with the hub's larger mission
 - Support economic development and advocacy
 - Support staff time and build capacity
- Fiscal sponsorship, grant making, and TA support for aligned organizations

PRELIMINARY BUSINESS CASE

Defining the Need, Sizing the Demand

FWG sized demand for a food hub facility in Ketchikan based on the community needs identified through stakeholder interviews. A right-sized facility will meet needs of existing businesses and community members seeking processing space, but will also have capacity to incubate new business growth.

Capital Investments

The capital investments required in property acquisition, land development, transportation access, building costs, and equipment purchase will be itemized and factored into the debt financing scenarios for each facility operation. The Ketchikan food hub is the primary focus of FWG for this project scope, being specified for its core functions, modular capital and operating costs, and potential operating revenue.

Operating Costs

To project operating costs that are appropriately-sized but conservatively forecasted for decided core functions, throughput, or product volume, FWG will work with the KAPA team to develop an operating budget that includes baseline staffing requirements and other assumed costs derived from past FWG projects but adjusted for local rates.

Operating Revenue

Segmenting and forecasting operating revenue, philanthropic revenue, and incremental earned revenue as, for example, fee-based programs and services take shape, are projected in FWG's financial modeling tool. FWG will work with KAPA to project potential sales volumes, product margins and fee structures, user fee structures and rates based on facility core competencies (e.g., storage, transportation, sales, processing, etc.), and potential channels for grant and other low- or no-cost capital and grants.

FOOD HUB FACILITY

Site Selection Criteria

FWG charted the benefits and challenges of the properties put forth for site consideration. The current (as of March 2023) three most viable, known site options are as follows:

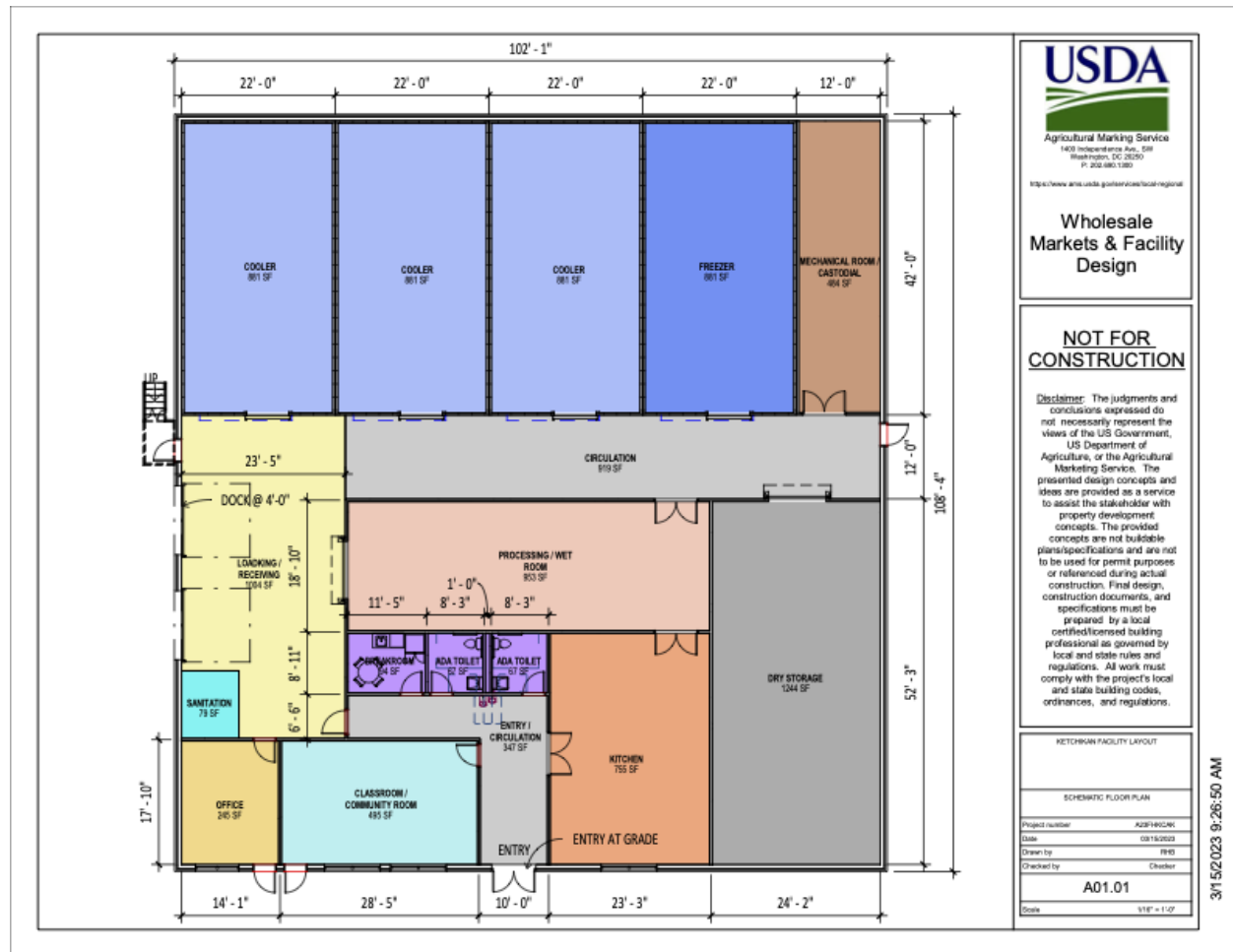
Prospective Site Name	Location	Contact	Details/Key Attributes
Cape Fox	North end of island, on water	Tiger Neville	Low to no cost to utilize; lease, not purchase; deepwater dock possible
Murphy's Landing	South of Ketchikan center, on water	Kevin Murphy	Flat land, no existing facility; no utilities; deepwater dock possible Estimated 3 phase service to the property/highway boundary was estimated to be \$20-\$25K. Estimated water tankage of 10K gallons - \$10K. Sewer up to 500 gallons per day of domestic waste, with marine outfall - \$10-\$15K.
Reid	North of Ketchikan center, on water; directly across the street from potential community facility		Already building out facilities for sea cucumber and urchin processing (opposite seasons from bull kelp). May be able to use part of land independently or join with facility being built

Another possible location for a community commercial kitchen has been identified at the site of Katherine Tatsuda's former grocery store building in downtown Ketchikan. Tatsuda would like the building to be used for community benefit. This is an alternative siting option in case the food hub does not end up including an accessible commercial kitchen. Concerns about the structural integrity of this building have been raised. The rock wall has been stabilized on a portion of the property. However, confirmation on the safety of facility buildout would be required, and would be limited to the reinforced section until additional efforts for stabilization are conducted.

FWG will continue to advise KAPA on possible properties as opportunities develop.

Facility & Financial Model

Based on the agreed upon core competencies, community needs, and local context, FWG worked with USDA Agricultural Marketing Service (AMS) Wholesale Market Design Architectural Services experts to develop a proposed facility layout (this does not include build-ready plans). Building specifications are expected to change with final site selection.



Draft facility layout for the KAPA Food Hub, produced by USDA AMS

Projected Facility Financials

Based on the modular functions, buildout and capital costs, equipment, and operating costs, FWG developed a [Facility & Financial Model](#) for the KAPA Food Hub. This tool is a customized pro forma with the ability to adjust financials as project components actualize pre- and early-stage implementation. As with the facility layout, final site selection will allow KAPA to further true-up the model.

WHAT'S NEXT FOR FWG

Explore Funding Opportunities

The new [USDA Regional Food Business Center \(Center\) opportunity](#) is intended to provide capacity-building, technical, and coordination assistance on the local and regional level. In 2023 funding was approved to develop a Regional Food Business Center (RFBC) for Islands and Remote Areas, including Alaska. Our work on this \$30 million grant will include deep engagement with food system stakeholders across Alaska, Hawaii, Guam, Puerto Rico, U.S. Virgin Islands, Commonwealth of Northern Mariana Islands, and American Samoa. Through the development of this RFBC, FWG has developed deep relationships with the Alaska Food Policy Council.

The Center will coordinate efforts, connecting government and tribal agencies with resources to develop define the needed technical assistance and capacity building, and then provide that direct support to small- and mid-sized food and farm businesses (producers, processors, aggregators, distributors, and others). The Center will also provide subawards up to \$100,000 to support project needs, including staff capacity, business planning, purchase of processing and other equipment, and more. Based on our findings, this type of holistic support is an excellent fit for bolstering the dozens of potential small food enterprises in Ketchikan, Matlaketla, and POW, through coordination and noncompetitive financial assistance.

Additionally, FWG worked with KAPA to submit their USDA LFPP Implementation Grant application in 2023. Pending acceptance, FWG and KAPA would move forward with developing a food hub in Ketchikan. FWG continues to prospect locally, regionally, statewide, and nationally to identify additional funding opportunities from public and private sources to support this work.

Topics for Continued Research

- Explore potential partnership with a willing fish processor established in the region, like Trident, AGS, and/or EC Phillips.
 - Local, independent fishermen need access to small- and mid-scale processing in order to sell fish locally. These processors have high-volume industrial capacity for exported products. If a large fish processor were willing to enter an agreement to allow for some use of their equipment by smaller users, this could potentially open up a valuable and more affordable local protein source for the region.
- Educational partnerships to expand technical assistance in the region for food production

- Organizations like Greenwave and The Sustainable Learning Project are conducting educational programming in Southeast Alaska. This presents a potential partnership opportunity for KAPA to develop to create technical assistance.

APPENDICES

[Stakeholder Interview Matrix](#)

[Stakeholder Matrix](#)

[Stakeholder Budgets/Costs of Operations](#)