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A. Letter of Introduction Regarding the Alaska Food Strategy Task Force Report

August 1, 2023

Honorable Michael Dunleavy Office of the Governor State of Alaska

Honorable Presiding Officers and Members Alaska State Legislature State of Alaska

Dear Governor Dunleavy, Presiding Officers and Members of the Alaska State Legislature:

As required in the signed legislation in 2022, House Bill 298, and as Chair of the 2023-2024 Alaska Food Strategy Task Force, I submit our first of two reports and respectfully request your earnest review and consideration of the recommended steps enclosed herein to increase food security in Alaska.

Alaskans understand how an interruption in the supply chain could deplete our store shelves of food in a short time span; because of this, the public is very supportive of efforts to reduce our vulnerability. Whether an earthquake, a pandemic, port strikes in the lower 48, or some other debilitating factor, we know we are just one crisis away from a food shortage. Because the Alaska Food Strategy Task Force established by House Bill 298 recognizes that the work to reduce our dependence on outside sources for food will not be an overnight process but an ongoing one over a number of years, we believe that the work must begin sooner rather than later. To that end, we have provided achievable action items in this report to start this vital process.

Please know that one of our primary statutory directives was to continue the commendable efforts of the now expired Food Security and Independence Task Force. Employing its report as a starting point and frequent reference, the Alaska Food Strategy Task Force has goals to 1) develop a comprehensive statewide food strategy; 2) strengthen the state's diverse food system; 3) improve food security for all residents of the state; and 4) grow the local food economies of the state.

House Bill 298 also set out seven focus areas for the Task Force to consider and about which to make recommendations to increase Alaska's food independence. The timeline for reporting on three of the seven focus areas is by August 1, 2023; the due date for the remaining four is August 1, 2024.

The Alaska Food Strategy Task Force Executive Board selected the following three focus areas for 2023:

- Sustainably growing the agriculture industry;
- 2. Sustainably growing markets for locally grown, harvested, and processed

foods; and,

3. Improving transportation and infrastructure to transfer and deliver food in the state.

Please accept the attached report with recommendations on the above three focus areas. In addition, we have included information regarding data, including available and needed data for measuring the success of these recommendations.

In closing, the Alaska Food Strategy Task Force implores you and others who read this report to commit to the work ahead toward greater food independence in our state. The attached report is not intended to collect dust in a file. We eagerly look forward to partnering with you and others to begin bringing these recommendations to fruition.

In pursuit of food security with you,

Shelly Hughes

Senator Shelley Hughes, Chair

Alaska Food Strategy Task Force

CC: Senate Secretary & Chief Clerk of the House of Representatives

B. Executive Summary

The Alaska Food Strategy Task Force (AFSTF) Executive Board convened organizational meetings on February 16 and March 9, 2023 to review its statutory guidelines and timeline, select the Chair and Vice Chair, and determine the appointment process for the remaining 27 AFSTF seats. Once the Task Force was seated, the full AFSTF met on April 14, 2023 to review the Governor's Food Security & Independence Task Force 2023 Report and to begin discussion on the selection of the three focus areas for 2023 out of the seven outlined in statute. Prior to the next meeting, the Executive Board finalized the selection of the three priority areas via an email poll. On May 26, 2023, the Executive Board met to finalize assignments of our 36 members to topical committees corresponding to the three focus areas. Each committee met over the summer three or more times to develop draft recommendations due to the Executive Board on July 15, 2023. The AFSTF Executive Board met July 19, 2023 to review and approve the draft recommendations made by each committee. In some cases, the Board made modifications to the draft recommendations prior to approving them. This report reflects the extensive work completed by the AFSTF in a short amount of time.

The three focus areas selected for this report and their corresponding recommendations consist of the following (order of list does not reflect level of importance):

Sustainably Growing the Agriculture Industry:

- Create an Alaska Department of Agriculture
- Expand Leases on State-Owned Land and Ensure Agriculture Activities via a State-Driven Proactive Approach
- Increase Research Capacity and Programs through UAF IANRE's Agricultural and Forestry Experiment Stations
- Improve Access to Capital for Producers through the Agriculture Revolving Loan Fund (ARLF) and the HB 298 Agricultural Forgivable Loan Programs (AFLP)
- Encourage Tax Exemptions for Farmland

Sustainably Growing Markets for Local Products:

- Create Alaska Grown Marketing Institute
- Re-establish an Alaska Meat Inspection Service
- Add Technical Assistance Officer Position
- Request Grocery Stores Track and Sell More Alaska Grown Products
- Expand Agriculture Revolving Loan Fund to Food Processors and Manufacturers

Improving Transportation and Infrastructure:

Improve Maritime Infrastructure

- o Decrease Rural Hub Food Loss via Climate-Controlled Storage Infrastructure
- Improve Aviation Infrastructure
- o Improve Bypass Mail Operations
- o Improve Data Collection and Analysis
- o Invest in Research and Innovative Technologies
- o Create Supply Chain Coordination Council
- o Increase Food Storage for Community Food Banks and Disaster Preparedness
- Extend Northern Rail

C. Introduction: Alaska Food Strategy Task Force

In 2022, the 32nd Alaska State Legislature passed House Bill 298 (HB 298), which established the Alaska Food Strategy Task Force (AFSTF) to 1) develop a comprehensive statewide food strategy, 2) strengthen the state's diverse food systems, 3) improve food security for all residents of the state, and 4) grow the local food economies of the state. To advance these larger objectives, HB 298 tasked the AFSTF with presenting state policy, legislation, and strategy implementation recommendations in seven integrated focus areas:

- sustainably growing the agriculture industry;
- sustainability growing markets for locally grown, locally harvested, and locally processed foods;
- improving transportation and infrastructure to transfer and deliver food in the state;
- enhancing the climate for food and beverage businesses or distribution businesses;
- minimizing food waste and diverting it from the waste stream;
- improving connectivity, efficiencies, and outcomes in state-run programs affecting food availability and access
- ensuring food security in rural and urban communities.

HB 298 provided the following guidelines to address and consider in each of the seven focus areas:

- Public, nonprofit and private investment in infrastructure
- Regulatory issues
- Research and development needs
- Environmental changes
- Workforce development needs
- Infrastructure needs and storage
- High food costs and food access
- Food safety
- Varying scales of food system and storage development
- Innovative technologies for Circumpolar North
- Adaptation of successful food system policies, models and programs across the Circumpolar North and other states
- Alaska tribal relations as they pertain to food security, food sovereignty and local storage methods
- Emergency preparedness

In consideration of the seven focus areas, along with applying the guidelines above, each recommendation is to meet the following criteria:

- Evidence based
- Stakeholder informed
- Economically sound
- Environmentally sustainable
- Equally accessible

Building Upon the Governor's Food Security & Independence Task Force

In early 2023, the Governor's Alaska Food Security & Independence Task Force, made up of 22 members, published its final report which included both recommendations for strengthening Alaska's food security and an in-depth look at Alaska's complex food system.

The stated goal of the Governor's Task Force was to "to increase food security, strengthen local economies, and lessen Alaska's dependence on external foods and supply chains." The directives included to "review and provide recommendations to the Governor of the State of Alaska regarding food security goals and policies, and guidelines for state initiatives that, to the maximum extent possible, increase local production, harvest, processing, storage, and use of food products. Once the report is received, there may be further clarification and deliverables identified that would require additional work by the Task Force."

The AFSTF seeks to continue the good work of the previous Task Force and further clarify recommendations by examining and recommending tangible solutions which include suggested action steps and also identify responsible entities, potential timelines, legislative or regulatory changes required, funding needs, and data metrics.

Alaska Food Strategy Task Force Members

Task Force Seat	Name	Organization
Executive Board - Chair	Shelley Hughes	Alaska State Senate
Executive Board	Click Bishop	Alaska State Senate
Executive Board - Vice Chair	George Rauscher	Alaska State House of Representatives
Executive Board	Donna Mears	Alaska State House of Representatives
Executive Board	Kelli Foreman	Alaska Farm Bureau

Task Force Seat	Name	Organization
Executive Board	Tikaan Galbraith	Alaska Food Policy Council (AFPC)
Executive Board	Michael Jones	University of Alaska Anchorage Institute of Social and Economic Research (UAA-ISER)
Executive Board	Evie Witten	Alaska Food Policy Council (AFPC)
Executive Board	Brandon Brefczynski	Alaska Industrial Development and Export Authority (AIDEA)
Mariculture development organization	Nick Mangini	Kodiak Island Sustainable Seaweed, Southwest Alaska Municipal Conference (SWAMC)
Agricultural development organization	Scott Mugrage	Alaska Farm Bureau
Fisheries-related Organization	Vacant	
Local food marketing organization	Erica Moeller	The Roaming Root Cellar
Hunger and nutrition organization	Cara Durr	Food Bank of Alaska
Economic development organization	Alyssa Rodrigues	Alaska Manufacturing Extension Partnership (MEP)
Food distribution or transportation industry	Kyle Hill	Alaska Commercial Co.
Alaska Native or intertribal organizations or Alaska tribal governments	Anthony Lindoff	Central Council Tlingit Haida Indian Tribes of Alaska
Alaska Native or intertribal organizations or Alaska tribal governments	Vacant	
Food producers in the state	Arthur Keyes	Glacier Valley Farm
Food producers in the state	Bryce Wrigley	Alaska Flour Company
Food service industry	David McCarthy	49th State Brewery/Northern Hospitality Group
Food service industry	Natalie Janika	Twisted Spruce Kitchen
Alaska FFA or 4-H; youth member	JQ Davis	4-H

Task Force Seat	Name	Organization
UA-Anchorage	Katie Cueva	University of Alaska Anchorage (UAA)
UA-Fairbanks	Jodie Anderson	University of Alaska Fairbanks Institute of Agriculture, Natural Resources & Extension (UAF IANRE)
UA-Southeast	Kitty LaBounty	University of Alaska Southeast (UAS)
Alaska Pacific University	Rachael Miller	Alaska Pacific University (APU)
Expertise in food system development	Jen Schmidt	University of Alaska Anchorage (UAA)
Expertise in food system development	Amy Pettit	Farm Services Agency (FSA)
Expertise in food system development	Melissa Heuer	Spork Consulting
Department of Natural Resources	Bryan Scoresby	Director, Division of Agriculture
Department of Fish & Game	Rick Green	Special Assistant
Department of Health	Heidi Hedberg	Commissioner
Department of Commerce, Community & Economic Development	Julie Sande	Commissioner
Department of Education and Early Development	Gavin Northey	Child Nutrition Programs
Department of Transportation and Public Facilities	Katherine Keith	Deputy Commissioner

Assisting the Task Force:

Name	Organization		
Amy Seitz	Alaska Farm Bureau		
Robbi Mixon	Alaska Food Policy Council		
	Alaska Food Policy Council, Graduate Intern (University of		
Lunia Oriol	Michigan)		
Vanessa Collier	UAA-ISER		
Heidi Tesher	Alaska Department of Education and Early Development		
Anneliese Roberts	Senator Hughes		
Anne Rittgers	Senator Bishop		
Craig Valdez	Representative Rauscher		
Corey Alt	Representative Mears		

D. Process: Establishing First Three Focus Areas

The AFSTF has been tasked to report on the seven integrated focus areas on a timeline established by HB 298. The AFSTF decided to report on three focus areas by **August 1, 2023,** and the remaining four by **August 1, 2024**. The AFSTF reports are to be submitted to the governor, as well as to the senate secretary and the chief clerk of the house of representatives to be made available to members of the Alaska State Legislature.

With a shorter time frame in 2023 than in 2024 to consider the focus areas, the AFSTF Executive Board considered the best approach to making the selection for the first round, deciding to concentrate on three of the areas out of the seven. Also, instead of only considering importance, the Executive Board selected the areas that had impactful actionable items with data and stakeholder support. Executive Board members, in addition, considered existing resources such as funding, current programs, and previous recommendations not yet implemented.

With the criteria established for making an informed decision, the Executive Board set the following three focus areas to provide recommendations on in 2023:

- Sustainably Growing the Agriculture Industry
- Sustainably Growing Markets for Local Products (Grown, Harvested, and Processed)
- Improving Transportation and Infrastructure to Transfer and Deliver Food in the State

To make work more efficient for developing recommendations in each focus area, the AFSTF formed three committees, assigning members with related expertise. The committees were directed to review work that had already been done by the previous Task Force and consider other and new ideas. In developing their recommendations, the committees were instructed to not only propose solutions, but also to include suggested strategies and steps to be taken to transform the idea into a reality and to list the entities/agencies who would be responsible to take the action, the needed funding and policy change requirements, as well as the data needs and how to measure success once the recommendation is implemented.

Task Force Timeframe and Changes

While the recommendations presented in this report cover the first three focus areas, there is significant overlap in all sectors of the food system, and additional information and needs will

come to light while discussing the next four focus areas in 2024. The AFSTF reserves the right to review this first round of recommendations throughout the full process, due to the shorter time frame in 2023. The continued discussion and review may result in changes to the recommendations reported in this document as well as additional recommendations in these three focus areas. Any changes or additions will meet the same criteria set out in House Bill 298.

Data Disclaimer

Alaska is data-poor in terms of food systems tracking. While much knowledge already exists, whether that of individuals, communities, or cultures about building food systems resilience, that knowledge remains a disconnected and underleveraged resource in Alaska to attain state-wide food security. Efforts to address food insecurity in Alaska are ongoing and involve a range of stakeholders, including individuals, non-profits, businesses, government agencies, and decision makers. Accurate and up-to-date food system data and information is essential for all stakeholders to better understand the challenges and opportunities facing Alaska's food system, to develop strategies to promote more sustainable and equitable food systems, and to measure impact.

Demystifying the "95%" Statistic

It is often stated that Alaska imports 95% of its store-bought food. References range from "95% of food in Alaska is imported" to "95% of the food [Alaska] *purchases*" is imported — a distinction which is very important for understanding the role of wild food for Alaskan food security. A report by Meter and Goldenberg (2014) attempted to uncover the source of this statistic and reported that: "The source [...] is apparently a 1977 speech given by James Drew, former Dean of the agriculture school at UAF, but also has been attributed to the retired director of Alaska Cooperative Extension, Hollis Hall, speaking to a forum at Delta Junction in 1998 (p.32)." The percentage of purchased food that originates out of state is undoubtedly very high, and may actually approach 95%. But adding precision and context to this statistic would be very useful to help craft food systems policy. Do we care about the percentage of food weight (lbs) that is purchased? The percentage of

¹ Paragi, T., Gerlach, S., & Meadow, A. M. (2010). Security of the Red Meat Supply in Alaska. *Agroborealis*, A1 (1), 36-37.

² Meter, K. and Goldenberg, M.P., 2014. Building food security in Alaska. Crossroads Resource Center: Minneapolis, MN, USA, 16.

caloric or nutritive value (e.g., kCal) that is purchased? The units of interest are important when considering what type of data could be used to track this type of metric.

The food security implications of import dependency are complex. What is clear is that Alaska is highly dependent on food importation, and that our logistical challenges naturally make us much more vulnerable than other states. Importation itself is not necessarily a bad thing, as we expand the diversity of our diets and the market seeks the most cost-effective sourcing for Alaskan customers. However, while we live in a global market, shortening supply chains can help support more robust food systems, reduce risk of disruption, allow access to fresher and therefore more nutritious foods, and retain value in our state economy.

Quantifying the percentage of consumed foods that are purchased, and the percentage of purchased foods which are imported, should be Alaska's first step toward establishing an accurate baseline. We also need to better understand regional variation in the percentage of wild vs. purchased food consumption to optimize our preparation for and responses to environmental or supply chain shocks.

Food system change can be overwhelming because food is a resource connected to everything—from supply chain to language to weather patterns. Knowing where to start and who is responsible for managing food security tracking and action planning takes collaboration, clean and robust data, long-term, multi-administration vision, and sustained funding.

Moving toward robust food system data accessibility

Food research, policy making, and related program development are often guided by "indicators"—or points of reference to determine the adequacy or performance of a food system sector. For this report and its suggestions, indicators "indicate" or point to a section of the food system for review. They are a way to categorize and label data that are then ready for analysis. The data is then compared over time and/or to local, state, federal, or global standards to evaluate status-quo and highlight areas for improvement. Indicators are widely used and categories and sub-categories vary greatly. They may be quantitative, qualitative, or both, depending on the research or project focus. Most (if not all) recommendations in this report will provide information and/or guidance on relevant existing (or needed) data and indicators (see section "Metrics Recommended to Measure Process" and "Data")

Publicly available data dashboards are a useful and increasingly common tool to establish a baseline landscape and track changes over time. These dashboards gained popularity, including

in Alaska, during the COVID-19 pandemic, as residents sought up-to-date information about case counts, hospitalizations, and deaths. Dashboards often aggregate these indicators from a variety of federal, state, and county agencies (as well as other trusted sources), then analyze and present them in an accessible, clear, and visually appealing manager, information is then presented in a manner that is easy to understand and use. Such a dashboard could be created to communicate food systems information for a variety of uses, such as determining areas in need or at risk, shopping local, disaster planning, community projects and grant writing, student and faculty publications, and more (for more information, see **Recommendation: Improve Data Collection and Analysis**).

E. Introduction to Task Force Recommendations

Our food system at its base consists of numerous parts—plants, animals, wild harvesters, producers, fishers, processors, distributors, transporters, retailers, marketers, consumers—the list goes on. Each part of the system directly or indirectly affects every other part. At every scale—community, town, region, state, etc.— food is a web, interconnected and, to some degree, dependent on each other. Much like a natural ecosystem, changes in one area affect others and unintended consequences may occur with significant impact to consumers, the economy, and the environment. A systems approach examines both the whole and the individual parts. By studying each part through a holistic lens, a picture emerges showing how each individual, industry, community, and environment is affected. One can identify the strengths and weaknesses of systems and examine how a decision in one area affects a community at another end of the system. A systems approach also looks at all dimensions, from access to education and health, to environmental impacts and who is affected most, and illuminates interdependence and relationships. From here, the system can be evaluated to uncover problems these solutions may cause, taking into account each perspective and their related perceived costs and benefits. A systems approach can help create clear visions for achieving tangible, sustainable, and lasting changes.

"The food system spans the activities, people, and resources involved in getting food from field to plate, from agriculture through nutrition and beyond. Along the way, it intersects with aspects of public health, culture, society, policy, and the environment."

—The Johns Hopkins Center for a Livable Future, Food System Primer³

To fully address food issues and challenges, a systems-based approach is necessary—an interdisciplinary, multi-sectored framework for research and policy aimed at sustainable solutions for a healthy food supply. This approach acknowledges the relationships between the different parts of the food system and the social, economic, and environmental outcomes of activities within the food system. Systems thinking sheds light on non-linear processes in the food system, offering integrative perspectives to policy solutions. A systems approach also expands the perspective when seeking to understand and ameliorate the root causes of problems such as poverty, malnutrition, and the impacts of climate change, in which food sits at the crossroads." The AFSTF adopted a systems-thinking approach when creating these policy recommendations, understanding that there are numerous overlaps and interdependencies across the focus areas.

(This text was adapted from the 2023 Alaska Food Security & Independence Task Force Report.)

³ https://www.foodsystemprimer.org/

F. Focus Area One: Sustainably Growing the Agriculture Industry



(Photo: "Vanderweele Farm - Palmer Alaska" by alexander_geoff is licensed under CC BY 2.0.)

1. Recommendation: Create an Alaska Department of Agriculture

This recommendation proposes implementation of one of the following options:

- create an Alaska Department of Agriculture (AKDA)
- restructure the DNR to become the Alaska Department of Natural Resources and Agriculture
- build a strong Division of Agriculture within the DNR.

During territorial and early statehood days, agriculture was viewed as an important industry for producing food for the residents of Alaska. Alaska had a Department of Agriculture and support services for farmers and ranchers. However, shortly after statehood the Department of Agriculture was rolled into DNR as a Division, and agriculture took a back seat to other industries with support services being reduced. Alaska's agriculture industry has much potential and opportunity for growth, which would be realized more quickly if the support programs are built back up and housed under one roof. Programs and agencies to consider being housed under an AKDA, but should not be limited to the following:

- Administration and support similar structure to other departments
- Media
- Board of Agriculture
- Future Farmers of America
- Agriculture Lands Program
- Agriculture Inspections
- Marketing (bolster this program or create the Alaska Grown Marketing Institute)
- Grant Administration
- Animals & Livestock (to include Office of the State Veterinarian)
- Meat Inspection
- Plant Production
- Environmental Services
- Forestry
- Mariculture

Consolidating programs that support farmers and ranchers under an AKDA would create greater efficiency and expedite support for those reaching out for assistance and resources. It would also streamline interagency communication: with a commissioner level seat, decisions could be made more quickly during emergency situations, generating a faster reaction time to situations that could reduce crop and livestock losses during disasters and disruptions. A separate department would also result in agricultural policies and funding needs receiving more focus and hearings in the legislature and more attention from Alaska's governors over time, which would serve to strengthen agriculture and food security overall in Alaska.

Responsible Entity/Entities:

- Alaska Executive Branch: Change or add departments by executive order, and implement changing offices and departments.
- Alaska Legislative Branch: Introduce legislation for the statutory changes needed and provide funding in the budget for a department.

Action and Implementation Timeline:

• Short-term (1-2 years)

- Mid-term (3-5 years)
- Long-term (5-10 years)

Year 1:

- Review agencies, programs and authorities that should be housed in an AKDA.
 - Look at structure, staffing needs and funding levels. Consider any additional authorities an AKDA would need.

Year 2:

• Draft statutory language needed to create the AKDA and include funding in the budget.

Year 3:

• Move offices under an AKDA, and work on any regulatory changes needed to update structure.

Years 4-5:

• Review and propose any regulatory changes necessary.

Assets or Resources Available:

Almost all other states have a Department of Agriculture and can be used as examples for structuring.

State Funding Needs:

Estimate: Unknown but more than \$20 million

Statutory or Regulatory Changes:

This would require significant statutory and regulatory changes.

Additional Research:

Review funding levels for all programs that would be housed in a Department of Agriculture as well as funding needed to expand current programs or add programs.

Metrics Recommended to Measure Progress:

To be determined, but would pertain to: increased crop and livestock production, increased acreage in production, increased yields, increased net farm incomes; increased jobs in farming, ranching, food processing; increased Alaska Grown product sales and retail representation in stores; decreased out-of-state food imports per capita.

Data:

To be determined, but the above metrics may be tracked in part through:

- USDA Census of Ag data; Alaska Annual Statistical Bulletins tracked at varying time intervals and with some missing values
- AK DOLWD's Quarterly/Annual Census of Employment and Wages e.g., Industrial Classifications: '111' for Crop Production, '112' for Animal production, '311' for Food Manufacturing
- Primary data collection through direct surveys to Alaska Grown registered producers
- Commodity Flow Survey import volume and value reported at five-year intervals, and measured with significant uncertainty at the product type level

 Potential for voluntary disclosure of food-related import estimates (volume and value) from major maritime, air, and surface transport firms; reported through aggregated statistics to preserve commercially sensitive information

Note: some items would require novel data collection, funding and/or assignment of responsible entities.

2. Recommendation: Expand Leases on State-Owned Land and Ensure Agriculture Activities via a State-Driven Proactive Approach

This recommendation proposes to work with the farming community to understand where leases for State-owned land should be expanded; ensure agriculture activities are happening on these lands.

Responsible Entity/Entities:

• Alaska DNR, Division of Mining Land and Water, Resource Assessment and Development

Action and Implementation Timeline:

- Short-term (1-2 years)
- Mid-term (3-5 years)
- Long-term (5-10 years)

Years 1-5:

• Assess Existing Area Plans and Identifying Gaps:

- Relevant state agencies initiate a comprehensive review of the existing Area Plans for State-owned land, focusing on agricultural development and identifying areas where the plans are insufficient or nonexistent, with the intention of each region being as self-sustainable as realistically possible.
- State agencies responsible for land management and agriculture collaborate to assess the potential for agricultural expansion in different regions of the state, considering factors such as soil quality, water availability, and proximity to markets.
- Engage with relevant stakeholders, including farmers, ranchers, agricultural
 organizations, and government agencies, to understand the needs and challenges faced
 by the farming community in these areas.

• Conduct State-Led Public Outreach and Gather Input:

- Organize public meetings, workshops, and online surveys to gather input from the farming community, local residents, and other stakeholders regarding their vision and priorities for agricultural development.
- Collaborate with agricultural extension services, universities, and research institutions to conduct studies on the economic feasibility and environmental sustainability of potential agricultural expansion areas, with the state taking the lead in funding and directing the research.

• Develop State-Driven Area Plans:

- Utilizing the input received from the farming community and stakeholders, the state government takes the lead in developing Area Plans for the identified regions.
- Ensure that the state-driven plans address key concerns raised during the public outreach phase, including access to resources, infrastructure development, environmental conservation, and land tenure arrangements.
- Seek expert input and review from agricultural specialists, land-use planners, and environmental scientists, with the state playing a leading role in coordinating and directing their involvement.

• Conduct Public Review and Revision:

 Publish the draft Area Plans for public review and invite feedback from the farming community, local residents, and other interested parties.

- Conduct additional public meetings and workshops to gather feedback and address any concerns or suggestions raised during the review process.
- Revise the draft plans based on the feedback received and incorporate any necessary amendments or modifications.
- Schedule more frequent periodic reviews of Area Plans pertaining to agriculture use between the regular Area Plan revisions which typically occur once every 20 years; engage stakeholders, Department (or Division) of Agriculture; make adjustments as necessary.

• Once Approved, Commence Implementation:

- The state takes the lead in seeking approvals for the proposed expansion of leases for State-owned land and the implementation of agriculture activities outlined in the plans. Allocate necessary resources, including funding and staffing, to support the implementation of the Area Plans.
- Establish mechanisms for ongoing monitoring, evaluation, and adaptive management of the plans to ensure their effectiveness and make necessary adjustments when required.

Assets or Resources Available:

N/A

State Funding Needs:

Indeterminate

Statutory or Regulatory Changes:

The Resource Assessment and Development team is currently drafting a new Area Plan white paper with a review of their existing regulations and statutory requirements.

• **Note:** whether through official statutory or regulatory changes, or through internal policy, there should be a regular (every four years) review and reporting specific to agriculture lands.

Additional Research:

- Area plans typically have a timeline of up to 20 years, but the duration may vary depending on the availability of staffing and funding resources. However, it is important to note that many area plans can be completed within a shorter time-frame.
- Certain areas within the state may not have any existing area plans in place. These areas are in need of comprehensive planning to guide agricultural expansion and related activities.
- It is essential to understand that area plans are not rigid and unchangeable. They can be
 modified as needed through smaller amendments or site-specific plans. This adaptability allows
 for continuous improvement and adjustment to address emerging needs, changing priorities,
 and evolving circumstances. The state retains the authority to make these modifications and
 ensure that the area plans remain effective and aligned with the overall agricultural
 development goals.
- While area plans are primarily driven by the state, incorporating public input from various stakeholders, they cover a large geographic area and provide a comprehensive framework for agricultural development. On the other hand, site-specific amendments are demand-driven and initiated by interested parties who have specific plans and goals in mind. These amendments focus on specific areas or projects and are tailored to meet the unique requirements and objectives of those parties. By accommodating both state-driven area plans and site-specific

amendments, the state can effectively balance overall development objectives with the specific needs and aspirations of interested parties within the farming community.

Metrics Recommended to Measure Progress:

- Land Area: Measure the total land area designated for agricultural expansion through state-led Area Plans. This metric indicates the extent of available land for agricultural activities.
 - Note: This metric would require range specialists to evaluate available land to determine forage availability and animal-unit-months (AUMs) supported by the land
- Lease Agreements: Track the number and size of lease agreements established between the state and farmers or agricultural organizations for utilizing state-owned land. This metric reflects the successful implementation of lease expansion initiatives. Compare the number and size of lease agreements 5 and 10 years ago to establish a trend.
- Agricultural Production: Monitor the quantity and diversity of agricultural products cultivated or
 produced on state-owned land. This metric indicates the effectiveness of the plans in promoting
 agricultural activities and increasing agricultural output.
 - Note: This metric may require additional data to distinguish between production on state-owned land and non-state owned land. Previously, data was collected on the number of animals grazed on these leases, but this was discontinued.
- **Economic Impact:** Assess the economic impact generated by agricultural activities on state-owned land, including factors such as job creation, income generation, and contribution to the local and state economy. This metric highlights the role of agricultural expansion in fostering economic development.
 - Note: Existing data does not appear to distinguish between agricultural activity on state land versus otherwise. Assessing the employment levels and total salaries generated by agricultural activities at the state level can be determined with data from the AK DLWD, but assessing agriculture's contribution to the local and state economy would require a commissioned, in-depth impact assessment.
- **Environmental Sustainability:** Evaluate the adoption and implementation of sustainable farming practices on state-owned land, such as soil conservation, water management, and biodiversity preservation. This metric measures the extent to which the plans prioritize environmental stewardship.
 - Note: This metric would require primary data collection. It is unknown whether data regarding producer practices exists in Alaska. Forage availability estimates include conservation in the lease agreement maximum grazing allowances, as measured by range specialists.
- **Stakeholder Engagement:** Gauge the level of engagement and satisfaction of stakeholders, including farmers, agricultural organizations, local residents, and other relevant parties. This metric assesses the effectiveness of public outreach efforts, involvement of stakeholders in the planning process, and their perception of the state-driven approach.
 - Note: Evaluating the level of engagement and satisfaction of stakeholders would require primary data collection through a survey. A state-wide livestock conference or symposium could provide a forum to achieve this.
- Amendments and Modifications: Monitor the number and nature of amendments and modifications made to the Area Plans based on evolving demands, emerging needs, and changing circumstances. This metric reflects the adaptability and responsiveness of the state-driven approach.

- Implementation Timeline: Track the progress of plan implementation against the established timeline, identifying milestones achieved and potential delays or challenges. This metric ensures timely execution and serves as a reference for evaluating progress.
- **Funding Allocation:** Monitor the allocation and utilization of funding resources dedicated to agricultural expansion and infrastructure development on state-owned land. This metric ensures the effective utilization of financial resources and adherence to budgetary considerations.
- Long-Term Impact: Conduct periodic evaluations to assess the long-term impact of the state-driven approach, considering factors such as improved agricultural productivity, sustainable land use practices, enhanced rural livelihoods, and overall socio-economic development. This metric measures the success and sustainability of the implemented plans over time.

Data:

See notes under section "Metrics Recommended to Measure Progress."

3. Recommendation: Increase Research Capacity and Programs through UAF IANRE's Agricultural and Forestry Experiment Stations

There is a clear correlation between increasing in-state research and increased agricultural production. The peony industry is the largest agricultural export product in Alaska, which was a direct result of UAF researchers who contributed to an increase in economic development and a growth of the peony industry which didn't exist before.

Today, Alaska's agricultural research needs to become more agile as the state faces increasing food security demands and needs for industrial growth and expansion. State-driven investments in agricultural research will open more opportunities for diversified research production, meet federal capacity grant funding needs, and become a viable place for collaborative agricultural research with other states and nations.

Investing in agriculture research at Alaska's land grant university needs to consist of long-term investments in items including in new field equipment, transportation vehicles able to move the new field equipment, and storage of the new equipment to prolong their usability. There needs to be commitment to provide funding and allow the necessary time for building the facilities resources, both equipment and personnel, as well as commitment to improving facilities.

Improved and modernized research facilities will not only support all the researchers but will also be an obvious physical manifestation of the support the State of Alaska has for agricultural research. This will be at the top of the package for future agricultural investors coming to Alaska to build the industry and increase food security. Furthermore, inventory investors will note the development of a career pipeline in Alaska agriculture and see the State is committed to the success of agriculture in Alaska.

Responsible Entity/Entities:

- The Alaska Governor: Ensure funding is included in budgets.
- The Alaska State Legislature: Ensure funding is included in budgets.
- University of Alaska System: Implement agriculture research recommendations.

Action and Implementation Timeline:

- Short-term (1-2 years)
- Mid-term (3-5 years)
- Long-term (5-10 years)

Year 1:

• Secure funding for the short term investment of equipment and storage.

Year 2:

- Use funds for the below listed equipment and structures:
 - Three large and three medium multipurpose utility tractors at our research sites in Delta Junction, Fairbanks, and Palmer
 - Farming implements necessary to prepare, plant, and harvest fields for multiple types of agricultural research: cover cropping, no-till practices, small grains, horticultural crops, plot drills, plot combines, cultivators, and combines

- Research projects are often replicated in both Fairbanks and Palmer due to the extreme differences in climate at both locations. Getting two of all equipment allows the replication research to take place at both locations without transportation of the equipment for work often on the same day. With our research site in Delta Junction used as a third replication site, three of everything isn't necessary as some specialty implements can be transported from Fairbanks to Delta Junction and back, however that will require new, reliable, and safe transportation equipment
- Equipment shed large enough to house the equipment and keep it out of the weather, extending the life of equipment equipment shed at both Fairbanks and Palmer facilities

Year 3:

Secure funding for hiring faculty and staff.

Years 4-5:

- Hire below listed faculty and technicians as well as support staff:
 - Agricultural economist UAF last had one in 2004. A researcher specifically looking at the economics of agriculture in Alaska is one obvious need to bring investors to Alaska and increase the agriculture industry.
 - Agricultural engineer UAF last had one in 1998. There are two areas of need in this title
 and we would only pursue one: specialization in GIS/remote sensing/satellite imagery to
 design farm-scale technology to improve production or designing small-scale farm
 equipment suited to work agricultural production on Alaska farms where the greatest
 number of farms are on less than nine acres.
 - Agricultural hydrologist UAF has never had one. Water is becoming more of an annual issue, Alaska needs expertise to help find better ways to deal with early season drought, water quality, and irrigation design for multiple cropping systems.
 - Agronomist UAF has an agronomist near retirement. This researcher will work with commodity crops such as barley, oats, wheat, rye, and oil seeds to improve productivity and support commercial growers.
 - Forage UAF last had one in 2018. Feeding livestock Alaskan feed will keep protein prices down compared to shipping in animal feed. This researcher will work on Alaska animal feed production.
 - Horticulturalist UAF last had one in 2016. Vegetable cultivation and production will be this researcher's specialty supporting wholesale, market, and direct sales producers in greenhouse, high-tunnel, and field food plant and specialty crop production systems.
 - Hydroponics/vertical growing UAF has never had one. Year-around production of food
 is an area many producers are talking about and one way to accomplish this is through
 hydroponics. This researcher would work with the opportunities brought by external
 investors in Alaska.
 - Livestock (non-ruminant) UAF last had one in 1995. This researcher would work with all livestock that are not hoofed herbivores like poultry (chickens, turkeys, and ducks) and swipe
 - Livestock (ruminant) UAF last had one in 2020. This researcher would work with all livestock that are hoofed herbivores like cattle, goats, sheep, reindeer, yaks, and bison.
 - Plant geneticist (horticulture) UAF last had one in 1995. With the changes in growing seasons, Alaska needs new varieties of vegetable crops to increase sellable production.

- Pomologist Unsure if UAF ever had one. This researcher will specialize in fruit and its cultivation specifically looking at the commercial markets and fruit production.
- Weed scientist UAF last had one in 2012. This researcher will work on ways to keep weed pressure down in agricultural production fields as changes in climate and growing season increases result in greater numbers and types of weeds in Alaska.

Year 6:

- Secure funding and start the process of maintaining/upgrading facilities that have been neglected.
 - The Fairbanks Experiment Farm currently has no lab space, no research faculty or technician office space, no classrooms, no research-level greenhouse, and no high-tunnels. There are plans for a multi-use facility that will include all that is currently lacking, however the funding is needed to bring these plans to reality.
 - The Matanuska Experiment Farm and Extension Center in Palmer requires a modernized facility infrastructure, multi-use space to support agricultural research.
 - There is outdated laboratory equipment in Fairbanks, and results are unreliable due to the age of the equipment. The Palmer facility no longer has laboratory equipment since 2015 when the soils lab was decommissioned by UAF due to lack of financial support. Both locations also need recent and up-to-date laboratory instruments and equipment that are consistent with current research and industry standards. This is a long-term investment as equipment will be purchased by the above listed research faculty to support their specific research projects.
 - \$2,000,000 in internships, partnerships, and collaborations with external groups to bring additional knowledge and capacity to Alaska agricultural research.

Assets or Resources Available:

The larger land-grant universities known for their agricultural research did not build that reputation overnight. They had tremendous financial and policy support from their state governments, even beyond an initial large investment. Below are some states that could be used as good examples for structuring/funding and strong research program:

- North Carolina State University
- Washington State University
- Ohio State University
- University of Wisconsin Madison
- Michigan State University
- Montana State University
- Cornell University

State Funding Needs:

- Field, transportation, and storage equipment (Short-term): \$5,000,000
- Faculty/Technicians/Support Staff Hiring (Mid-term): \$8,000,000
- Capital projects at both the Fairbanks and Palmer Experiment Farms (Long-term): \$30,000,000

Statutory or Regulatory Changes:

N/A

Additional Research:

N/A

Metrics Recommended to Measure Progress:

- Improved quality & quantity of products available
- Increased economic activity on items being researched
- Improved agricultural productivity (yield)
- Increase in Alaska Grown product volume and value, as well as increased retail presence
- Agricultural Employment
 - **Note**: Data can be used from the Department of Labor to track the number of Alaskans working in agricultural production

Data:

See notes under section "Metrics Recommended to Measure Progress."

4. Recommendation: Improve Access to Capital for Producers through the Agricultural Revolving Loan Fund (ARLF) and the HB 298 Agricultural Forgivable Loan Programs (AFLP)

This recommendation proposes to improve access to capital for producers based on two key actions:

- Update and help facilitate participation in the ALRF terms and policies to increase access to farmer capital
- Leverage newly created agriculture-related forgivable loan funding streams, created by the HB 298 AFLP.

Responsible Entity/Entities:

- Alaska DNR Division of Agriculture: Implement ARLF and provide assistance on granting.
- Other entities with granting experience (e.g., Soil and Water Conservation District)

Action and Implementation Timeline:

- Short-term (1-2 years)
- Mid-term (3-5 years)
- Long-term (5-10 years)

Year 1:

- ALRF: Collect stakeholder feedback on terms and policies that would make the ARLF more attractive for farmers.
 - Review rates, acceptable uses, eligible applicants, etc.
- HB 298 AFLP:
 - Include HB298 funding in the budget.
 - Direct DNR to create regulations for programs and hold information meetings with stakeholders so they can plan for applications; consider uses that could leverage additional federal/private funding to continue expanding programs

Year 2:

- ALRF: Create legislation or regulation necessary to implement policy changes.
- HB 298 AFLP: Work with producers to start taking applications and distribute funds.

Year 3:

- ALRF: Implement changes and start outreach to stakeholders on changes
- HB 298 AFLP: Based on funds used, request to provide annual funding in the operating budget.
 - Review federal funding sources to determine if forgivable loan funds can be used to leverage additional dollars for sustaining the program

Years 4-5:

 HB 298 AFLP: Review governing statutes and regulations, determine if changes are needed to improve success of programs.

Assets or Resources Available:

ALRF:

- Minnesota Department of Agriculture Farm Opportunity Program (for comparison)
- Montana Wood Products Revolving Loan Program (for comparison)
- Iowa Department of Agriculture and Land Stewardship (example to consider for program specific policy changes)

HB 298 AFLP:

- Tennessee Agriculture Enterprise Fund
- Tennessee Agriculture Enhancement Fund

State Funding Needs:

- Initial funding for HB298 AFLP: \$3,000,000
- Sustained annual funding levels based on demand

Statutory or Regulatory Changes:

- Establish regulation for HB298 forgivable loan programs.
- Based on terms and policy changes, there will be regulatory and/or statutory changes required to the ARLF.

Additional Research:

- Stakeholder feedback on terms and policies
- review similar programs from other states, federal government or other countries

Metrics Recommended to Measure Progress:

ARLF:

- Number of ARLF applicants and approved loans
- Dollar amount invested and its impact on local economies
 - Note: impact estimates would require specialized research efforts and primary data collection
- Increase in production
 - Note: production levels specific to certain groups of producers would require primary data collection

HB 298 AFLP:

- Number of applicants/recipients
- Number of improved/expanded current farm operations and new operations established
 - Note: data on number of new operations likely to be readily trackable, though primary data collection may be necessary to track improvements on or expansions of current farm operations (depending on data field availability reported in current documentation)
- Number of applicants who successfully complete requirements and have loans forgiven versus those required to repay
- Dollar amount invested and its impact on local economies
 - Note: impact estimates would require specialized research efforts and primary data collection
- Increase in production
 - Note: production levels specific to certain groups of producers would require primary data collection

Data:

See notes under section "Metrics Recommended to Measure Progress."

5. Recommendation: Encourage Tax Exemptions for Farmland

This recommendation proposes a change in criteria for tax exemptions for farmland to increase agricultural production. Local governments should be encouraged to provide these exemptions.

Areas of tax exemptions to review:

- **Income requirement:** Change from 10% of yearly gross income from farmland activities to NASS definition of farm with \$1000 in sales and filling out a schedule F on taxes.
- **Exemption versus deferment:** Remove the requirement to repay back taxes if land is sold for non-agriculture uses.
- Structures exemptions: Review if any other improvements should be included.

Responsible Entity/Entities:

- Alaska State Legislature: Implement statutory changes.
- Alaska Borough/local governments: Adopt exemptions at the local level.

Action and Implementation Timeline:

- Short-term (1-2 years)
- Mid-term (3-5 years)
- Long-term (5-10 years)

Years 1-2:

- Conduct meetings/surveys to collect feedback from producers and local governments on the following:
 - the most beneficial tax exemption policies to support increased production on farms
 - why farms choose to participate and for what reasons (e.g., for farms not participating, why are they not? For farms participating, what are recommendations to improve?
 - o incentives for local governments to implement tax exemptions
 - impact(s) of tax exemptions on other taxpayers/ property owners (requires data collection/accessibility)

Year 3:

Introduce legislation with changes to tax exemptions.

Years 4-5:

• Work with local governments to approve tax exemptions.

Ongoing:

Provide outreach/informational resources to farmers on tax exemptions.

Assets or Resources Available:

• Policies from other agriculture-rich states (most states have these in place already for farmland)

State Funding Needs:

Consider a type reimbursement for local governments as an incentive to adopt tax exemptions. However, there needs to be an assessment of how this would affect other taxes, and consider other incentives to offer to local governments.

Statutory or Regulatory Changes:

This would require statutory changes and policies adopted at the local government level.

Additional Research:

- Stakeholder feedback on terms and policies
- Review of similar programs from other states

Metrics Recommended to Measure Progress:

- Number of farms eligible and taking advantage of tax exemptions
 - Note: Participation data should be available from existing local government sources.
 Current data may not be available on 'eligible' farms, however this would be streamlined to pull from federal databases if the program is changed to \$1000 in sales.
- Number of farms taking advantage of the tax exemption able to increase production and net annual income
 - Note: Distinguishing production and income estimates between particular groups of farmers would require primary data collection

Data:

See notes under section "Metrics Recommended to Measure Progress."

G. Focus Area Two: Sustainably Growing Markets for Local Products



(Photo courtesy of Tanana Valley Farmers Market, Fairbanks, Alaska)

1. Recommendation: Create Alaska Grown Marketing Institute

This recommendation proposes to create an Alaska Grown Marketing Institute (AGMI) with the mission of increasing the accessibility and sales of Alaska Grown foods to Alaska residents. This recommendation builds on this Task Force's recommendation to establish the Alaska Department of Agriculture and supports the recommendation to compel large grocery chains to carry Alaska Grown products.

Marketing and supply are currently limiting factors to reaching large markets for many Alaskan farmers. Programs exist to promote marketing of locally grown food in Alaska, but financial support for most programs is weak, along with a lack of coordination between programs and consumer-facing communication regarding availability and access to local food. This keeps farm growth slow in the state.

The AGMI would be created using the Alaska Seafood Marketing Institute (ASMI) as a successful, in-state institutional model of integrated and long-term marketing strategies. While ASMI is focused on promoting Alaska seafood as a globally recognized and respected brand, the AGMI would apply the same structure and strategies toward a primary audience and target market of Alaska residents*, with the goal of significantly increasing the amount of local food produced and consumed in the state (and therefore increasing food security). The AGMI mandate would include coordinating and fostering collaboration with other programs (e.g., Buy Alaska, Made in Alaska), as well as improving Alaskans' access to local foods (e.g., through support of existing and new food hubs). Transforming the Alaska Grown program into the AGMI would produce a more robust program with the added benefit of having several different revenue streams. To ensure success, the AGMI should be part of an integrated Alaska Department of Agriculture (upon creation).

*The AGMI could also be used to market certain food products outside Alaska to allow the economies of scale and larger markets needed to make expansion of certain types of production more feasible as well as to bring down the product price to help the producer be more competitive with the lower 48 and to help the Alaskan consumer via more affordable products. For instance, livestock producers could export highly sought-after organ meats that bring a good price overseas and sell their meat products to Alaskans at a more affordable price.

Responsible Entity/Entities:

Alaska State Legislature: Create a new public corporation under Alaska Statute which would lead
marketing efforts for local foods in part by supporting and/or coordinating existing State of
Alaska programs.

Action and Implementation Timeline:

- Short-term (1-2 years)
- Mid-term (3-5 years)
- Long-term (5-10 years)

Years 1-2:

Propose a Statutory change to establish AGMI, following the model of ASMI: AGMI would be a
public-private partnership between the State of Alaska and the Alaska agriculture and
aquaculture industries, established to foster economic development within the agriculture

sector, to provide greater access to locally produced foods, and promote food security in the state.

- AGMI would work with sellers, chefs and marketers of Alaska Grown to support their sales activities by providing resources and support to build value and educate consumers on healthy, sustainable Alaska Grown products.
- AGMI would play a key role in coordinating and bolstering existing state, federal and private programs aimed at supporting Alaska Grown products, and in positioning Alaska's agriculture and aquaculture sectors as a competitive market-driven food production industry.
- Like ASMI, AGMI would have a governor appointed Board of Directors, allocated to fairly represent the diversity of producers in the state. Through a system of committees, the board and staff receive input from throughout the sectors.
- Fund and consistently support Alaska Grown program, as a pilot platform to grow into AGMI.

Years 3-5:

• Launch AGMI.

Years 5-10:

 Add international trade show representation to help Alaska farmers grow external markets, in addition to serving local markets.

Ongoing:

- Bring together producers interested in collaboratively growing AGMI.
- Establish integrated and long term marketing strategies that create demand and pride in Alaska for Alaska Grown products.
 - Hire an individual/entity with experience in (food) marketing
- Coordinate between agencies, tie in existing local marketing efforts and programs that provide access to local foods (e.g., Alaska Grown, Buy Alaska, Made in Alaska, SNAP, Food to Institution, etc.).

Assets or Resources Available:

- Model after Alaska Seafood Marketing Institute (public-private partnership).
- Build on the foundation of:
 - Division of Agriculture (e.g., Alaska Grown Program)
 - Alaska DCCED (e.g., Made in Alaska, Buy Alaska)
 - Alaska DOH (e.g., SNAP, CSFP, Farmer's Market Nutrition Program, Senior Farmers' Market Nutrition Program, etc.)
- Coordinate with, support, create synergies with other existing institutions, including Alaska's
 many nonprofits (e.g., AFDF, Alaska Mariculture Alliance, AFMA, AFPC, Alaska Farm Bureau, etc.)
 and university entities (e.g., UAF Cooperative Extension Service, UAA SBDC, etc.).

State Funding Needs:

- 2-3 FTE (Director, communications expert(s), administration)
- Advertising and public outreach budget (social media, print, radio, TV, events, etc.)
- Travel, office space, etc.

Note: Funding needs require additional research.

Statutory or Regulatory Changes:

Statutory change is needed to establish AGMI, following the model of ASMI.

Additional Research:

- Recent history and current status of funding for the Alaska Grown program
- ASMI structure and budget
- Data needed to further establish metrics, particularly on advertising and market visibility

Metrics Recommended to Measure Progress:

- Increase in Alaska Grown products:
 - Number of distinct products registered
 - Note: Data would come from Alaska Grown organization records.
 - Number of distinct firms registered
 - Note: Data would come from Alaska Grown organization records.
 - Volume of products sold (measured in dollars and lbs/quantity)
 - **Note:** This could come from a survey of AK Grown registered producers. Alternatively, this data could be requested from private retailers, though it's unclear whether this distinction is always made in their inventory management systems (e.g., bulk versus bagged items).
 - Total sales with Alaska Grown label.
 - Note: likely requires direct survey of registered producers
 - Percent of total sales/volume of sales that is Alaska Grown by product type (produce, meats, processed, etc.).
 - **Note:** This data would have to come directly from retailers, but it could be commercially sensitive. This would also be contingent on their inventory management systems carrying Alaska Grown designations, etc.
 - Increase in "market reach" (which could indicate sales outside of AK linked to marketing efforts)
 - o Number of businesses/partners buying Alaska products registered with the program
 - Retailer figures likely require a survey.
 - Establishment of outreach/social media platforms
 - Number of different platforms
 - Number of users, likes, shares, etc.
 - Once beginning usage of apps to increase sales:
 - Establish a digital coupon app for domestic customers to get discounts
 - Get the Alaska grown label into other grocery store apps
 - Once establishing a relationship with the cruise industry to get Alaska Grown produce on cruise ships:
 - Number of AK grown items used
 - Volume of AK grown items used
 - Volume of products sold to cruise ships
- Increase in percentage of food produced and purchased in the state relative to imports.
 - Note: this statistic is very complex to calculate and would require several layers of (ongoing) primary data collection to supplement existing secondary sources

• Financial investment, integrated and long term marketing strategies, and increased sales of Alaska Grown products.

- Alaska Grown organizational records
- (Novel) direct surveys of Alaska Grown participating entities on production and sales volumes, marketing outlets, with assurances of aggregation in data reporting to protect commercially sensitive information
- (Novel) direct surveys of grocery retailers, with assurances of aggregation in data reporting to protect commercially sensitive information
- The USDA Census of Agriculture has dollar value estimates for agriculture and aquaculture at five-year intervals
- Potential for voluntary disclosure of food-related import estimates (volume and value) from major marine, air, and surface transport firms; reported through aggregated statistics to preserve commercially sensitive information
- Additional data is needed to establish some metrics proposed above see data notes under section "Metrics Recommended to Measure Progress"

2. Recommendation: Re-establish an Alaska Meat Inspection Service

Alaska today relies entirely on the federal government to inspect our meat, and they provide an insufficient level of service. Alaska should reinstate its meat inspection service to provide more capacity to certify meat for in-state sale. Budget cuts in 1999 ended Alaska's state-funded meat inspection. The program could be administered by a relatively small staff. Wyoming, a similarly-sized state, spends \$400,000 per year on state meat inspection. The Federal Meat Inspection Act provides that the federal government cover 50% of the cost of state-administered meat inspection programs.

Responsible Entity/Entities:

- Alaska Legislative Branch: Pass a budget funding the meat inspection program authorized by HB 298.
- Alaska Executive branch: Promulgate regulations to implement and execute the law.

Action and Implementation Timeline:

- Short-term (1-2 years)
- Mid-term (3-5 years)
- Long-term (5-10 years)

Year 1:

- Pass funding. (by May 2024)
- Promulgate regulations, take public comment. (by December 2024)

Year 2:

• Finalize regulations and begin licensing inspectors. (by December 2025)

Year 3:

• *Start inspections.* (by June 2026)

Assets or Resources Available:

• Federal funding for half of the program is available.

State Funding Needs:

The Federal Meat Inspection Act provides that the federal government cover 50% of the cost of state-administered meat inspection programs. Wyoming has a state-administered meat inspection program that inspects the slaughter of roughly 2500 animals/year.⁵ It spends about \$400,000 per year in state funds to fund 5.5 FTE.⁶ In 1997, Alaska's program spent \$287,000 in general funds for 6 staff

⁴ Office of the Federal Register, National Archives and Records Administration. (1999, July 12). 64 FR 37666 - Designation of the State of Alaska Under the Federal Meat Inspection Act and the Poultry Products Inspection Act. [Government]. Office of the Federal Register, National Archives and Records Administration. https://www.govinfo.gov/app/details/FR-1999-07-13/99-17737

⁵ Wyoming Department of Agriculture. (2020). Meat Inspection in Wyoming [PowerPoint slides]. https://wyoleg.gov/InterimCommittee/2020/05-20200601MeatInspectioninWyoming-JointAgPPT.pdf

⁶ https://www.wyoleg.gov/InterimCommittee/2020/02-20201207010-DepartmentofAgriculture.pdf

(\$607,000 including federal matching funds). The state funding portion would be equivalent to \$545,000 today.

Statutory or Regulatory Changes:

The Federal Meat Inspection Act requires that states seeking to inspect their own meat enact standards at least as strict as those required for federal inspection. HB 298 provides the DEC Commissioner the ability to establish such a program in regulation (AS 17.20.017). The DEC Secretary would need to promulgate such regulations to enable this program. If this regulation is implemented, the forgivable loan program for meat processing facilities, AS 03.20.210, describes an eligible facility as one that "operates under a program of **federal** inspection". That language would require a technical correction.

• If the recommendation to establish a Department of Agriculture is undertaken, the establishment of the program may need to be under the authority of the new department (depending on timing).

Additional Research:

- How many animals are slaughtered for meat for sale in Alaska today?
- What could the market be if inspection capacity were no object?

Metrics Recommended to Measure Progress:

Increase in livestock inventories, yearly marketings, and gross income from livestock sales

- The USDA Census of Agriculture tracks livestock operations and inventory at the state and regional level (at five-year intervals), but some of the more granular data fields are missing for Alaska; historical records could establish trends
- The Alaska Annual Statistical Bulletin tracks livestock inventories, marketings, and value of production; historical records could establish trends

3. Recommendation: Add Technical Assistance Officer Position

Given the vast remoteness of communities in Alaska and the frequent challenges associated with food security, the importance for developing a comprehensive understanding of the strengths and barriers related to food security and the programs intended to support food systems is vital. Through the Division of Agriculture, USDA, and private 3rd parties, there are numerous grant and loan programs available to producers, yet they are difficult for them to navigate and determine which are best for their circumstances. A number of Alaskan producers have conveyed their need for technical assistance. Farmers excel at growing food but not necessarily navigating grant application processes.

A FTE at the Division of Agriculture, a Technical Assistance Officer, and designated contract funds to hire an independent contractor with subject matter expertise should be dedicated to helping Alaskan producers pinpoint and utilize available funding opportunities as well as technical assistance to support their agricultural businesses.

The FTE would:

- monitor state and federal policy developments for new programs and changes to existing ones,
- communicate with Alaskan producers about upcoming deadlines, policy changes, eligibility and application pitfalls,
- contribute to the development of instructional materials that will support USDA outreach and program access,
- provide individual application assistance to producers for grants, loans and program opportunities,
- ensure that services and technical assistance are provided to address natural resource concerns and state, federal and private lands,
- develop regional outreach and technical partnerships that positively contribute to TA delivery,
- advocate for practices that are culturally sensitive and technically sound,
- act as liaison between the Division of Agriculture on resources such as the Alaska Grown certification, microgrants, food safety and inspection, etc.,
- identify potential funding sources to support meeting match requirements of federal grants and loans, including maintaining a list of potential partners that have current projects that could provide in kind match support,
- provide customized support to navigate between USDA programs as needed based on operational needs, and
- provide onsite technical assistance to producers to identify the best fit for available resources.

The independent contractor would:

- provide individual application assistance to producers for grants, loans and program opportunities, such as grant writing, application review, and general technical assistance, and
- support individual producer grant administration and reporting.

Responsible Entity/Entities:

- Alaska Executive/Legislative branch: Receive funding request coming directly from Division of Agriculture.
 - Alaska Legislative branch: Budget the new position and contract funds. Define its responsibilities in intent language.

o Alaska Executive branch: Use the money as directed through the Division of Agriculture.

Action and Implementation Timeline:

- Short-term (1-2 years)
- Mid-term (3-5 years)
- Long-term (5-10 years)

Year 1:

- Pass a budget with funding for a new staffer and contract funds.
- Hire and train up new staff.

Assets or Resources Available:

There's an existing grants administrator in the Division of Agriculture.

State Funding Needs:

Position: \$100,000Travel: \$15,000

• Contract Funding: \$50,000

Statutory or Regulatory Changes:

N/A

Additional Research:

- Uptake rate among Alaskans eligible for revolving loan fund/food security micro grants, etc.
- USDA grant money per capita (relative to other states)
- Total grants missed out on by Alaskans due to denied applications

Metrics Recommended to Measure Progress:

Number of Alaska food-related grants submitted and money received (in dollars)

Data:

• To be collected; reported from grant submissions, successful and otherwise

4. Recommendation: Request Grocery Stores Track and Sell More Alaska Grown Products

Farmers markets are great venues for producers to sell locally-grown foods, but achieving food security for Alaska will require production at scale. Grocery stores are the only purchasers in the Alaska food ecosystem with the scale to drive significant growth in the state's agricultural sector. Although local produce struggles to compete with many categories of imported produce on a fair price comparison basis, locally grown produce has advantages in terms of freshness, taste, nutritional value, and shelf life. Recent efforts by this legislature and the administration have demonstrated a commitment to build the processing infrastructure required to deliver the consistency of product that stores require over the long term. This recommendation proposes the following:

- Request that grocery stores develop a code to track Alaska Grown product sales: Alaska Grown products may be in the internal SKU descriptions of retailers (e.g., the Alaska Commercial Co., Fred Meyers, Carrs/Safeway). Produce managers from some major retailers report that bagged Alaska Grown items are more likely to carry a specific SKU, while 'bulk' produce (Alaskan source or otherwise) is generally recorded in a catch-all SKU by product. Efforts should clarify that these SKUs exist, which gaps remain under current inventory management systems, and if distinguishing data exists, request to form a data sharing agreement.
- Request that grocery stores provide increased shelf space for Alaska Grown products alongside imported products. Although large stores may be able to import and sell less expensive products grown outside of Alaska, management of these stores need to understand that many consumers have strong preferences for locally grown foods. A marketing opportunity almost certainly exists as a meaningful number of residents are willing to pay for the added freshness, added nutritional value, and better taste, and active efforts should be taken to test expansion of this market.

Responsible Entity/Entities:

- Alaska Governor
- Alaska Office of Food Security
- Alaska OMB: Fund the loan programs authorized under HB 298. Put money to mouth.
- Alaska State Legislature: Implement other recommendations of this task force to demonstrate commitment toward long-term development:
 - Investments in cold storage to extend availability
 - Opening ARLF to manufacturers to provide more finished goods
 - o Fund HB298 forgivable loans

Action and Implementation Timeline:

- Short-term (1-2 years)
- Mid-term (3-5 years)
- Long-term (5-10 years)

Year 1:

- The Governor's budget development process demonstrates a commitment to development of the local agriculture industry. (by Fall 2023)
- The Governor arranges meetings with grocery execs, and the legislature expresses support. (by Spring 2024)

Amend possible sales tax to carve out Alaska grown products. (by Spring 2024)

Year 2:

• Fred Meyer pilots with local growers, decides on suppliers. (by Fall 2024)

Year 3:

• Alaskan producers begin to deliver at scale. (by 2025)

Assets or Resources Available:

 Alaska already has a host of programs in statute to enable fast scale-up of our local agriculture industry. Producers have the facilities to get capital for land clearing, vehicles, processing equipment, and more, but these programs need funding, and producers need markets.

State Funding Needs:

State funding needs are dependent on the implementation of other programs.

Statutory or Regulatory Changes:

This recommendation is dependent on the implementation of other recommendations in this report.

Additional Research:

- How much local food was purchased by grocery stores at the peak of that activity? When was that peak?
- How can retailers such as Alaska Commercial Co. be integrated into this approach? What unique points of leverage does the state have in that relationship? Conditions on cold storage facilities?

Metrics Recommended to Measure Progress:

- Increase in volume and value of Alaska grown food sold through grocery store channels
- Percent of total sales/volume of sales that is Alaska Grown by product type (within produce, meats, processed, etc.).
- Number of businesses/partners buying Alaska products registered with the program

Note: Metrics for this recommendation will largely mirror those outlined in the "Alaska Grown Marketing Institute (AGMI)" recommendation

Data:

• All grocery stores have data pertaining to sales of Alaska grown food in their stores due to each product having unique SKUs, though this may be limited in some product categories Grocery stores such as Alaska Commercial Co. could provide its unit sales or dollar sales of Alaska grown produce given that each SKU is unique and the name "Alaska Grown" is placed in the name of many (if not all relevant) SKUs. Representatives at some other major grocery retailers indicated that bagged items may have specific SKUs for "AK Grown" products, but 'bulk' items (e.g. 'fresh whole carrots, lb.') generally have a single SKU and may not distinguished by place of origin in the inventory management systems. This may be a similar case across many (or most) grocery stores in Alaska.

- Data could also be solicited through a direct survey to registered Alaska Grown producers on volume of production marketed through various marketing channels
- To compute the percentage of sales in product categories which are 'Alaska Grown', you must have access to total sales volumes (likely by product type, to ensure relevance). Retailers may or may not be willing to provide data on total sales of item categories, which could be cross-referenced with records from known registered Alaska Grown producers. Reasonable assurances of data aggregation in reporting to protect commercially sensitive information may be necessary.

5. Recommendation: Expand Agriculture Revolving Loan Fund to Food Processors and Manufacturers

The Alaska ARLF has provided critical capital to Alaskan farmers since before statehood. Although the program has been successful in providing low-interest, fixed-rate loans to Alaskan producers, those producers are held back by a lack of demand for their raw and processed products here in Alaska and a lack of processing and manufacturing capacity in state to turn those ingredients into finished goods for the in-state consumer market.

The recommendation proposes that food processors and manufacturers have access to the Agriculture Revolving Loan Fund and that priority for available funds go to processors and manufacturers who use more than 51% Alaska Grown inputs by weight. This will stimulate the formation of new businesses to process and manufacture Alaskan ingredients into food for Alaskans, thereby boosting demand for those Alaskan ingredients.

Responsible Entity/Entities:

- Alaska State Legislature: Amend statute to allow manufacturers to access the fund. Capitalize the loan fund to prepare it to handle a wave of new applications.
- Alaska DNR: Promulgate new regulations for evaluating applications from food manufacturers. Eliminate requirements to have agricultural experience.

Action and Implementation Timeline:

- Short-term (1-2 years)
- Mid-term (3-5 years)
- Long-term (5-10 years)

Year 1:

- Pass a bill to expand eligibility.
- Pass a budget to give the fund more money to lend out (if needed), add staff capacity.

Years 1-2:

 Promulgate regulations to implement statutory changes (include notice and comment period, etc.).

Years 2-3:

• Hire and train additional program staff.

Year 3:

• Begin taking manufacturing applications.

Assets or Resources Available:

Program, policies, and staff are already in place.

State Funding Needs:

Acquire data on uptake rate for existing loan programs from the DNR.

Statutory or Regulatory Changes:

AS 03.10.020 (a)(1) defines the eligible populations and purposes for loans made under this program.

Additional Research:

- What are the boundaries of the definition of a food manufacturer?
- What's the potential market size?
- Are there similar programs in other states?
- Are there other changes needed to the ARLF to increase its utilization (e.g., loan size, loan terms)?

Metrics Recommended to Measure Progress:

- Number of Alaska food manufacturers who apply to the ARLF by the first year (followed by first three years)
 - Note: To acquire a percentage of manufacturers applying, a rough estimate of the number of food manufacturers in the state is available through Dun & Bradstreet.
- Percentage of the available ARLF that is dispersed through loans
- Volume and value of manufactured food produced in Alaska
- Employment gains in the Alaskan food manufacturing sector

- ARLF organizational records (TBD)
- State-level production statistics by sector at the 2-digit NAICS level are available from the Bureau of Economic Analysis within the US Department of Commerce, including "Food and beverage and tobacco product manufacturing". This provides a value estimate, within the state's GDP. Volume estimates may require specialized data collection efforts.
- AK DLWD's Quarterly/Annual Census of Employment and Wages e.g., Industrial Classifications: '311' for Food Manufacturing

H. Focus Area Three: Improving Transportation and Infrastructure



(Photo: Port of Alaska, Anchorage, AK)

1. Recommendation: Improve Maritime Infrastructure

The Port of Alaska modernization project is a strategic initiative that aims to improve the overall performance and capabilities of the state's primary port, enabling it to better support Alaska's food security goals and promote efficient transportation and distribution of goods. This recommendation supports the modernization project by proposing:

- **improving port infrastructure** (measures essential for enhancing the capacity, efficiency, and resilience of Alaska's transportation infrastructure),
- modernizing facilities (upgrading port facilities to enable the handling and storage of perishable goods in a more efficient and reliable manner), and
- **creating redundancy** (e.g., in port infrastructure to minimize disruptions caused by unforeseen events or maintenance issues, ensuring a continuous flow of goods).

Responsible Entity/Entities:

- Alaska DOT&PF: Oversee transportation infrastructure projects and coordinate port improvements.
- ARRC: Manage rail operations and expansion, including rail expansion to Homer.
- **AIDEA:** Facilitate economic development projects, including port development and modernization.

Action and Implementation Timeline:

- Short-term (1-2 years)
- Mid-term (3-5 years)
- Long-term (5-10 years)

Months 0-6:

 Conduct Feasibility Study and Needs Assessment: DOT&PF, in collaboration with ARRC and AIDEA, should conduct a feasibility study and needs assessment for port improvements at Seward and Homer, including rail expansion to Homer and Port MacKenzie. This study should identify specific infrastructure requirements, estimate costs, and evaluate potential benefits.

Months 6–15:

 Develop Port Improvement Plans: Based on the findings of the feasibility study, DOT&PF and AIDEA should develop detailed plans for port improvements at Seward and Homer, as well as other key ports like Port McKenzie. These plans should outline the necessary infrastructure upgrades, expansion projects, and timelines for implementation.

Ongoing:

- **Secure Funding and Resources**: DOT&PF and AIDEA should work together to secure funding and resources for the port improvement projects. This may involve leveraging federal grants, exploring public-private partnerships, and seeking financial support from relevant stakeholders.
- **Collaborate with Stakeholders:** Engage in collaborative discussions with stakeholders such as local communities, indigenous groups, shipping companies, and trade organizations to gather input, address concerns, and foster support for the port improvement initiatives. Coordinating these discussions will require effective communication, collaboration, and alignment of interests.

 Initiate Construction and Expansion: Once funding is secured, initiate the construction and expansion projects at the identified ports, including rail expansion to Homer. Ensure proper project management, oversight, and adherence to timelines and budget constraints while maintaining minimal disruptions to port operations and existing services.

Assets or Resources Available:

- Existing port infrastructure and facilities at Seward and Homer
- Expertise and technical knowledge of DOT&PF, ARRC, and AIDEA staff
- Formula funds, potential federal grants
- Collaboration and support from local communities and stakeholders
- Relevant data and studies on port usage, traffic, and economic impact

State Funding Needs:

 Additional staff may be required to oversee the feasibility study, project planning, and construction phases. Funding for personnel should be allocated based on the specific project requirements and timelines.

Statutory or Regulatory Changes:

• Evaluate existing statutes and regulations governing port development and expansion to identify any necessary updates or modifications that may facilitate project implementation.

Additional Research:

- Research the economic impact, feasibility, and environmental considerations associated with port improvements, rail expansion, and the Port of Alaska modernization project.
- Analyze data on current port usage, shipping trends, and potential growth projections.

Metrics Recommended to Measure Progress:

- Project completion timelines compared to planned milestones
- Cost-effectiveness of infrastructure upgrades and expansion
- Increase in port capacity and efficiency
- Economic impact in terms of job creation, increased trade, and regional development
- Increased flow of goods, reduction in transportation costs, and improved connectivity between ports and inland areas
- Environmental sustainability measures implemented during construction and operation of port facilities

Note: Some metrics may require comprehensive tracking of project milestones and timelines (e.g., *cost effectiveness of infrastructure...*), complex data analysis and modeling (e.g., *economic impact in terms of...*), or monitoring and evaluation (e.g., *environmental sustainability measures...*).

Data:

Some data on port infrastructure, usage, and economic impact may already exist within the relevant departments and organizations involved, but additional research and analysis may be required. Data can come from various sources such as port authorities, transportation agencies, industry reports, and economic studies. Data on the volume and value of specific types of goods (i.e. food products) flowing

through maritime channels could be solicited from maritime carriers with reasonable provisions to aggregate data reporting and accommodate commercial sensitivities.

2. Recommendation: Decrease Rural Hub Food Loss via Climate-Controlled Storage Infrastructure

There is an identified need for statewide rural hub community infrastructure to accommodate week(s)-long delays in the transportation system. This would include dry, cold, and freezer storage. This recommendation proposes to develop a pilot program to reduce food loss and increase food security through rural hub infrastructure and transportation support. The pilot program would be built through the following actions:

- assessing the need for food storage and wastage in hubs and communities.
- **investing in food storage facilities at strategic locations across Alaska** to extend the shelf life of perishable goods and facilitate their distribution.
- considering large chill/freeze spaces that can be leased to regional operators and additional
 facilities and insert temperature tracking measures in Anchorage to support freeze/chill
 requirements in hubs.

Responsible Entity/Entities:

- Alaska DOT&PF
- Alaska DCCED: Lead the assessment of freeze/chill storage needs, gather data on shortages, and coordinate the investment in food storage facilities.
- **Local Government Entities:** Collaborate with the responsible entities to identify suitable locations and facilitate the implementation of food storage facilities.
- Private Sector: Help plan the pilot project and participate as key actors. Shippers who transport
 food and retailers who receive and market the food have a stake in and will benefit from
 decreased food spoilage, so they should take ownership and share in cost and maintenance of
 climate-controlled storage infrastructure.

Action and Implementation Timeline:

- Short-term (1-2 years)
- Mid-term (3-5 years)
- Long-term (5-10 years)

Years 1–2:

- Conduct a comprehensive needs assessment: A needs assessment would 1) identify the types
 and quantities of perishable goods that require freeze/chill storage, 2) assess existing storage
 infrastructure and its capacity, and 3) gather data on shortages and potential locations for new
 facilities.
- Develop a strategic plan for the investment in food storage facilities within one year: Identify strategic locations across Alaska based on demand, transportation accessibility, and population centers. Consider Anchorage as a hub for freeze/chill storage to support distribution to other areas.
- Identify two to three pilot communities that include a regional staff position to monitor food security and food safety in the pilot hub regions: Initiate the construction or retrofitting of storage facilities within two years.

Years 3-4:

- Modify the pilot programs and implement final versions throughout the state as research
 dictates: For construction and usage of the final versions, it will be necessary to secure funding
 for construction/retrofitting or storage facilities and to collaborate with local government to
 acquire suitable land or buildings.
- Initiate the construction or retrofitting process.

Assets or Resources Available:

- Alaska Commercial Co. (stores data), UAA-ISER research capacity, Models in Canada and other Nordic countries
- Expertise and resources within the Alaska DCCED and AIDEA
- Local governments for site identification and facilitation
- Potential funding through public-private partnerships, federal grants, or state appropriations
- Fees to be paid by shippers and retailers to purchase and maintain climate-controlled infrastructure

State Funding Needs:

- Funding for: 1) conducting research and the needs assessment, 2) developing the strategic plan, 3) implementing the pilot program, 4) overseeing construction or retrofitting, and 5) managing the leasing process.
- Funding for 1) ensuring adequate staffing levels and 2) acquiring expertise for successful implementation.

Statutory or Regulatory Changes:

- Evaluate existing statutes and regulations related to the construction, operation, and leasing of food storage facilities.
- Make necessary amendments to enable the efficient implementation and utilization of these facilities.

Additional Research:

- Study successful models of distributed food storage facilities in other regions or states to gather best practice
- Identify hubs with the greatest bottlenecks and food disruption issues.
- Identify or create regional food security staff positions potentially with DOT&PF
- Identify bypass mail tracking options
- Identify any alternatives to bypass mail, taking into account costs for end users
- Identify existing infrastructure at airport hubs and where there is capacity to add in additional climate controlled food storage, and other equipment needs (forklifts, trucks, staff, etc)

Metrics Recommended to Measure Progress:

- Increase in available freeze/chill storage capacity in Alaska.
- Reduction in food spoilage and waste due to improved storage capabilities.
- Number of local operators utilizing leased storage facilities.
- Improvement in the shelf life of perishable goods.
- Enhanced distribution efficiency and increased access to fresh, locally sourced produce.
- Potential reduction or stagnation in end user food costs.

- Freeze/chill storage capacity does not appear to be tracked alongside other assets/characteristics of public airports, as these are maintained by air carriers. Asset availability at key hub airports would need to be directly solicited from carriers.
- Retail data on food spoilage, or 'non-sellable on arrival' volume and values, would need to be solicited from key grocery retailers (e.g., ongoing cooperation with Alaska Commercial Co.) to identify losses in transit.
- Shelf life data would likely need to be solicit directly from grocery retailers
- Retail price data can be scraped from online retail price data from major retailers

3. Recommendation: Improve Aviation Infrastructure

Ensuring reliable aviation infrastructure for efficient transportation and delivery of food supplies is necessary to improve food security in Alaska. This recommendation includes the following:

- reliability and redundancy of Automated Weather Observing System (AWOS) systems:
 Redundancy of AWOS systems and accurate reporting on runway conditions are crucial for safe and uninterrupted operations. Ensuring redundancy in AWOS systems reduces the risk of disruptions in aviation operations caused by equipment failures or adverse weather conditions, leading to improved safety and efficiency in transporting food supplies.
- accurate reporting on runway conditions: Reliable reporting of runway conditions enables pilots and ground personnel to make safe and informed decisions, ensuring safe aviation operations.
- **runway extensions:** Extending runways allows for larger aircraft to operate, increasing capacity and efficiency in transporting larger quantities of food and supplies to remote areas of Alaska.
- autonomous aviation for food delivery: Preparing for and supporting autonomous aviation can address logistical challenges in remote regions where traditional aviation services are limited. Autonomous delivery systems have the potential to enhance the efficiency and timeliness of food distribution.

Responsible Entity/Entities:

- Alaska DOT&PF: Oversee aviation infrastructure and runway management in Alaska.
- **FAA:** Provide guidance and funding for airport infrastructure projects.

Action and Implementation Timeline:

- Short-term (1-2 years) (AWOS)
- Mid-term (3-5 years) (Runway Extensions)
- Long-term (5-10 years) (Runway Extensions)

Months 0-6:

- Feasibility Study and Assessment: The feasibility study should commence by identifying airports
 in Alaska that require improvements in AWOS systems and runway condition reporting. Evaluate
 the current state of AWOS systems and runway condition reporting at selected airports. Then,
 assess the cost and technical requirements for implementing redundancy measures for AWOS
 systems. Conclude by developing a prioritized plan for implementing redundancy measures and
 runway condition reporting improvements.
 - Note: coordinating with multiple airports and stakeholders to conduct assessments and implement improvements may require effective communication and collaboration. In addition, ensuring compatibility and integration of redundant AWOS systems with existing infrastructure and equipment could require technical expertise.

Ongoing:

Advocate for FAA Funds Eligibility: Engage with FAA representatives to discuss the importance
of runway extensions for Alaska's unique transportation needs, and reach out to stakeholders
such as industry associations and local communities to build a coalition supporting Alaska's
eligibility for FAA funds. Provide comprehensive data and analysis showcasing the benefits and
economic impact of runway extensions in Alaska.

Assets or Resources Available:

- Existing AWOS systems and runway condition reporting infrastructure
- Expertise and knowledge within DOT&PF and FAA
- Collaboration with aviation stakeholders and industry associations

State Funding Needs:

- Funding may be required for the feasibility study, technical assessments, and advocacy efforts.
- Budget allocation for potential redundancy measures and improvements in AWOS systems and runway condition reporting may be needed.

Statutory or Regulatory Changes:

• Potentially revise regulations or policies related to FAA funds eligibility for runway extensions in Alaska.

Additional Research:

- Conduct research on best practices and case studies from other regions or countries with similar aviation infrastructure challenges and successful redundancy measures.
- Explore potential funding mechanisms or grant opportunities beyond FAA funds for runway extensions in Alaska.

Metrics Recommended to Measure Progress:

- Number of airports with improved AWOS systems and runway condition reporting
 - Note: Measuring progress in terms of AWOS system improvements and runway condition reporting may require standardizing data collection and reporting across airports.
- Reduction in downtime or disruptions due to AWOS system failures.
- Increase in the availability and accuracy of runway condition reports.
- Progress in advocating for Alaska's eligibility for FAA funds for runway extensions (e.g., meetings held, support gained from stakeholders)
 - Note: Tracking advocacy efforts and progress in gaining FAA funds eligibility may require
 monitoring meetings, support gained, and any regulatory changes. WHile the
 importance of this metric is high, further analysis of data collection methods is needed.
- Number of successful runway extension projects funded through FAA or alternative sources
 - **Note:** Demonstrating the economic impact of runway extensions may involve complex data analysis and modeling.

Data:

Some data on AWOS systems and runway conditions may already exist at DOT&PF and the FAA. Additional data may need to be collected through assessments and evaluations conducted specifically for this recommendation.

4. Recommendation: Improve Bypass Mail Operations

Since its launch in 1972, the Alaska Bypass Mail system has successfully lowered the cost of food and general merchandise for 75,000+ Alaskans in hundreds of villages in rural Alaska. However, the system has a number of challenges that create food waste throughout the rural Alaska supply chain, including lack of freight tracking, product being shipped at 'shipper's risk' with no claims process, limited refrigeration capacity during airline-to-airline transfers in rural hub airports, frequent outages of rural weather stations resulting in canceled or delayed flights, and only one Alaska-based USPS employee with responsibility for the Bypass Mail system. As a result of these challenges, millions of dollars of food arrive in rural Alaska annually in inedible condition and are thrown away. Rural retailers build this expected food loss into their pricing models, increasing rural food prices.

A number of small modifications to the Bypass Mail system will reduce food waste in rural Alaska and make food more affordable and accessible. This recommendation proposes to minimize food loss throughout the Alaska Bypass Mail system through the following actions:

- work with the USPS on:
 - improving monitoring of freight within the Bypass Mail system by enabling a track-and-trace system
 - holding air carriers accountable for safeguarding perishable food within the Bypass Mail system
 - moving the Bypass Mail decision-makers back to Alaska to improve day-to-day management
- invest capital to repair, renew, and add redundancy to the Automated Weather Observing System (AWOS) throughout rural Alaska
- **invest in refrigeration capacity in rural hub airports** (e.g., Bethel, Nome, Kotzebue) to safeguard perishable food

Responsible Entity/Entities:

- Alaska DOT&PF
 - Note: Given that Bypass Mail is a federal program, there is no perfect state entity to be accountable for this recommendation. The Alaska DOT&PF is the most natural fit given that they regulate Alaskan airports, are accountable for the Automated Weather Observing Stations, and are involved in the rate-setting for the Bypass Mail system.
- **UAA-ISER:** Provide support with data and analytics.
- USPS: Persuade the USPS that these recommendations are worthy of consideration and pursuit.

Action and Implementation Timeline:

- Short-term (1-2 years)
- Mid-term (3-5 years)
- Long-term (5-10 years)

Months 0-6:

• **Prepare a full data analysis of the Bypass Mail system:** Analyze (with support from USPS) air carriers, retailers, and other community entities. Hold listening sessions with all stakeholders. Build a detailed action plan for each recommendation above.

Months 7-18:

• Implement the action plan: Work with the USPS to enable their track-and-trace system, hold carriers more accountable for food waste, relocate Bypass Mail management back to Alaska, improve the AWOS systems in rural Alaska, and invest in freeze/chill assets in rural Alaska.

Months 19-24:

• Assess the impact of this action plan.

Assets or Resources Available:

- Data provided by USPS
- Data provided by Alaska Commercial Co. stores
- Data provided by air carriers using the Bypass Mail system
- Data provided by Alaska DOT&PF
- Anecdotes and/or data provided by other shippers
- Analytical support from UAA-ISER

State Funding Needs:

No investment expected for changes made by the USPS.

Statutory or Regulatory Changes:

- No statutory or regulatory changes required in the State of Alaska.
- Revisions to the operational management of the Bypass Mail program (USPS) needed.

Additional Research:

- Assessment of the annual volume/dollars of food waste that is caused by the Alaska Bypass Mail system
- Assessment of the number of AWOS units that require repair or renewal

Metrics Recommended to Measure Progress:

- Shipping transit time, by product type
- Annual food waste within the Alaska Bypass Mail system, measured by volume and value of goods that are 'non-sellable on arrival'

- This analysis will need to be conducted from the ground-up by an external research team (e.g., UAA-ISER).
- Data on shipment transit times could be solicited from USPS, or more directly from grocery retailer records
- Retail data on food spoilage, or 'non-sellable on arrival' volume and values, would need to be solicited from key grocery retailers (e.g., ongoing cooperation with Alaska Commercial Co.) to identify losses in transit.

5. Recommendation: Improve Data Collection and Analysis

Improve data collection and analysis on food production, transportation, and consumption patterns through a dedicated dashboard can inform decision-making, identify areas for improvement, and support evidence-based policies and interventions.

As of now, key assets identified as bottlenecks did not have public data available (e.g., the presence and capacity of 'insuls' to keep food from freezing and 'reefers' to keep food cold is missing data). In addition, food waste is a key concern, reducing availability and putting upward pressure on prices; however, existing data on waste is currently from private sources.

This recommendation proposes purposeful reporting on the status of infrastructure critical to Alaskan food systems (e.g., flight frequency to rural communities with corresponding volumes of freight/mail)—combined with a consolidation of these data into an accessible running dashboard—to improve the efficiency of the food system in a timely, data-driven manner.

Responsible Entity/Entities:

- Alaska DOT&PF: Maintain a dataset on airport characteristics with the potential to broaden these fields for other transportation/cargo-related assets (e.g., tracking flight volumes).
- Alaska Farm Bureau and Alaska Division of Agriculture: Handle food-related data, including information about waste and losses.
- **UAA-ISER:** Offer support or leadership in organizing the prioritization of key indicators, and design a system to automate the ongoing collection and visualization of secondary data.
- **Open Data Geoportal:** A comprehensive hub for infrastructure-related data, to which data can be uploaded.

Action and Implementation Timeline:

- Short-term (1-2 years)
- Mid-term (3-5 years)
- Long-term (5-10 years)

Year 1:

From data gaps present throughout the AFSTF's findings, assemble categories and (where
possible) the potentially responsible entities for collection: Identify the scale of data to be
collected, identify proposed state agency divisions; if private data exists, assemble a baseline
dataset with data entry fields to gather. Provide precise data format examples to responsible
entities and solicit feedback on usefulness and practicality.

Year 2:

 Implement first year protocol for collection, review frequency of reporting and adjust as necessary.

Assets or Resources Available:

Depending on data fields needed, existing agency staff may simply add fields to existing
collection protocols, reducing time and cost burden. Others may require more original data
collection (e.g. food waste).

State Funding Needs:

- Support for agency staff hours
- Costs of dashboard expansion and data hosting, where necessary

Note: Funding requirements will vary based on the extent of critical data gaps identified.

Statutory or Regulatory Changes:

• Gathering of key data could be mandated by the state, but is likely possible through voluntary reporting.

Additional Research:

Ongoing review of data needs through stakeholder meetings.

Metrics Recommended to Measure Progress:

- Number of data products added to the database
- Number of distinct users/downloads accessing the added database products
- After two years, re-examine the FSTF's identified data gaps and address the percentage of data products that are now currently (publicly) available.

- Agreements on data fields should be collaborative, and expect some cost involved in reporting (on both the private and public sides).
- Public data sources include Bureau of Transport Statistics records, FAA records, and AK/US DOT databases
- Key data is generally held by private enterprises and some data may be deemed commercially sensitive.

6. Recommendation: Invest in Research and Innovative Technologies

Technological barriers are core to constraints in the infrastructure supporting Alaska's food systems. This recommendation calls for an investment in research and development of innovative transportation and storage technologies to remedy key bottlenecks in the aviation supply chain as identified by stakeholders:

- Inability to track movement of freight when shipped through Bypass Mail, which leads to inefficient cargo transfers at hubs and prolonged exposure, leading to spoilage. There is a need for encouraging USPS to (continue to) aggressively pursue technologies that allow shippers to track shipments and coordinate with carriers.
- Insufficient or non-existent controlled temperature storage for perishables in transit, with data
 demonstrating significant spoilage that peaks in deep winter and peak summer months.
 Innovative technological approaches to reduce fixed or variable costs of storage units would
 facilitate adoption. Technology is only part of the problem, as incentive structures inherent to
 the Bypass Mail rate-setting protocols do not encourage investment in assets to preserve food
 quality.
- Outages identified by bush carriers in Automated Weather Observing System (AWOS) units
 and reporting as constraints to running flights, which can constrain delivered food supply.
 Innovative solutions to pursue redundancies in weather reporting systems in remote, extreme
 environments would support greater (and more predictable) flows of goods.

This recommendation advocates for exploring the use of advanced logistics systems, smart packaging, real-time tracking systems, data analytics, and temperature-controlled storage solutions to improve food quality, reduce waste, and increase efficiency across the state.

Responsible Entity/Entities:

- Alaska DOT&PF: Lead research and development efforts to enhance transportation systems and explore innovative logistics solutions.
- **UA System:** Leverage research leadership in aviation technology, supply chain management innovation, and evaluation of potential technological impacts.
- USPS: Innovation in the Bypass Mail system, e.g. advanced tracking visible to shippers, will
 require momentum from USPS as the sole mail-system authority to roll out this technology.
- **FAA:** Advanced aviation breakthroughs, such as with autonomous aviation, will require complex regulatory reviews and approvals for FAA to approve beyond-visual-line-of-sight (BVLOS) systems in the national airspace.
 - Single technological innovation also frequently requires complementary technology as a 'package' suite to accomplish a result, so care should be taken to anticipate and simultaneously develop technologies along with their key dependencies.

Action and Implementation Timeline:

- Short-term (1-2 years)
- Mid-term (3-5 years)
- Long-term (5-10 years)

Years 1-2:

Conduct a comprehensive review of existing transportation and storage technologies:

- Assess the current state of transportation and storage technologies used in the food industry.
- Identify gaps and opportunities for improvement in terms of food quality, waste reduction, and efficiency.
- Evaluate the relative contribution of gaps mapped to key performance metrics

Year 2-3:

Research and identify innovative technologies:

- Explore emerging technologies, such as advanced logistics systems, smart packaging,
 real-time tracking systems, data analytics, and temperature-controlled storage solutions.
- Evaluate their potential application and effectiveness in Alaska's unique food transportation and storage challenges.

Year 2-4:

Pilot projects and partnerships:

- Collaborate with industry partners, research institutions, and technology providers to conduct pilot projects.
- Test and validate the effectiveness of selected technologies in improving food quality, reducing waste, and increasing transportation and storage efficiency.

Assets or Resources Available:

- Research institutions and universities with expertise in transportation, logistics, and food systems.
- Industry partners and technology providers with innovative solutions.
- Existing infrastructure and transportation networks in Alaska

State Funding Needs:

- Allocate funding for research and development initiatives, including pilot projects and partnerships.
- Secure resources for dedicated staff or research teams to oversee and manage the research and implementation process.

Statutory or Regulatory Changes:

- Assess existing regulations and policies related to transportation and storage in the food industry.
- Identify any necessary changes or updates to facilitate the adoption of innovative technologies.

Additional Research:

- Conduct in-depth market research and analysis of available transportation and storage technologies.
- Explore case studies and best practices from other regions or industries that have successfully implemented innovative solutions.
- Innovation in cargo-delivery aircraft, such as autonomous aviation designs, should be evaluated to understand how this may help alleviate flight restrictions during poor weather and/or labor shortages

Metrics Recommended to Measure Progress:

- Reduction in food waste along the transportation and storage process using baseline data.
- Improvement in food quality and safety standards
- Supply and affordability of retail food
- Increase in transportation and storage efficiency, measured by reduced transit times and improved delivery accuracy
- Cost savings achieved through the adoption of innovative technologies
- Feedback and satisfaction ratings from stakeholders, including food producers, distributors, and consumers

Note: Fairly concrete metrics likely exist to track effectiveness of innovations, although some will require cooperation from the private sector.

- Food waste data is largely held by private firms, based on historical write-offs. The Alaska Commercial Co. has offered 5 years of data to map the scale, seasonality, and geographic dispersion of the problem. Alaska Commercial Co. could potentially provide leadership in this space, encouraging greater participation.
- Supply of retail food is also private data, though records of product-level stock outs are possible.
- Retail price tracking is possible through web scraping (currently ongoing by UAA-ISER) and potentially through WIC and/or SNAP reimbursement requests (collaboration is ongoing to gauge the feasibility of this approach).
- Transit time data does not appear to exist for shipments within the Bypass Mail system, at least publicly. Private entities, including shippers and carriers themselves, have likely maintained these records.
- Feedback and satisfaction ratings would be original, primary data collection. This could potentially be collected through an annual survey of Food Systems Infrastructure stakeholders.

7. Recommendation: Create Supply Chain Coordination Council

The State of Alaska faces myriad challenges in food transportation and distribution throughout the state, including an aged Port of Alaska and a Bypass Mail system that loses millions of dollars of food every year. Despite best efforts by individual organizations, the food supply chain in Alaska remains very vulnerable, as the vast majority of purchased food in Alaska is imported from out of state.

Presently, each stakeholder group involved in the food system—distributors, retailers, transportation companies, non-profits, government agencies—attempts to solve challenges on their own, with limited success. There has never been a cross-functional council that has been convened to collaborate on solutions to these large issues. An action-oriented council composed of leadership from these key stakeholders would serve as a coordination body to solve supply chain challenges.

This recommendation proposes that the State of Alaska create a Food Supply Chain Council to manage ongoing challenges, opportunities, and risks in the transportation and distribution of food throughout Alaska. This council would have quarterly meetings that are structured, facilitated, and action oriented. A similar coordinated effort that is achieving success is the Alaska Early Childhood Coordinating Council (AECCC). Members of this council will include leadership from food producers, food distributors, retailers, transportation companies (sea, road, air), relevant government agencies, and food-driven nonprofits.

Responsible Entity/Entities:

- Alaska DCCED
 - There is no obvious state agency accountable for the food supply chain, but the mandate
 of the Alaska DCCED is aligned with the goal of a food supply chain that is resilient,
 sustainable, and efficient.
- Department of Agriculture (upon creation)

Action and Implementation Timeline:

- Short-term (1-2 years)
- Mid-term (3-5 years)
- Long-term (5-10 years)

This council could be created within 6 months and launched in 2024.

Months 0-6:

- Select representative(s) from Department of Commerce, Community, and Economic Development to be accountable for this Food Supply Chain Council
- Draft terms of reference for the council.
- Work with representatives from the FSTF to select organizations that should have a representative on the council and reach out to the organizations.

Ongoing:

- Begin holding quarterly meetings of the Council.
- Push for collaborative action to improve the food supply chain in Alaska.

Note: large bureaucratic councils often have a bias toward frequent discussion but inaction. It is important that this council have the opposite approach. The council will only succeed if organizations send their top decision-makers (CEO/General Manager/Executive Director) to serve on the council. Action is required to enact change and the expectation is that decision-makers will be present at meetings.

Assets or Resources Available:

N/A

State Funding Needs:

Funding is needed for 0.5 FTE in the DCCED to convene and facilitate the meetings and drive the council toward tangible action

Statutory or Regulatory Changes:

To be determined.

Additional Research:

None

Metrics Recommended to Measure Progress:

Participation Metrics:

- Number of meetings held per year
- Number in attendance from each key sector
- Percentage of designees in attendance
- Percentage of attendees from upper management (phrasing specific to sector)

Effectiveness metrics:

- Number of annual initiatives generated
- 3—year review to evaluate specific initiatives generated and the effect on flow efficiency, cost, and reliability of the food supply chain, with recommendations for improvement.

Data:

Ongoing, generated after council creation

8. Recommendation: Increase Food Storage Capacity for Community Food Banks and Disaster Preparedness

This recommendation proposes to assess the need for food storage and wastage in hubs and communities, immediately followed by a two-year statewide investment in food storage capacity at strategic locations across Alaska to extend the shelf life of perishable goods. This would aid community resilience, disaster preparedness, and statewide food security.

Analysis of Alaska Commercial Co. data on goods that are non-sellable on arrival indicates significant transit spoilage, particularly in produce where over \$1M in losses occurred from 2018-2022. Over 69,690 lbs of bananas, 10,988 lbs of apples, 22,636 of strawberries, and 28,446 lbs of tomatoes were non-sellable on arrival over this five-year period, which - in these three products alone - combine to an estimated average *annual* loss of about 29,700 full days of an adult's recommended fruit or vegetable intake. Peak produce loss in mid-winter and mid-summer indicate the need for both chill and insulative storage facilities.

Although the Food Bank of Alaska received \$6 million in FY23 from the state legislature through the Alaska DCCED to support infrastructure improvements to their network of food banks, pantries, meal programs, and other relevant community organizations, there were many worthy projects that did not receive funding due to limited resources. This project would be easily replicable and the need for the funding has been well established.

A two-year community infrastructure improvement program could be developed to distribute \$40 million over two cycles to fund small to medium scale infrastructure and operations. Examples of infrastructure projects that could be funded through this program include cooler or freezer space for a charitable food organization, storage space for community food cache to aid in disaster preparedness, or a community facility to process and store food. In addition to infrastructure capacity, there is a need for operational support to help organizations create, utilize, and maintain any infrastructure improvements.

Responsible Entity/Entities:

- Alaska DCCED: Lead the assessment of freeze/chill storage needs, gather data on shortages, and coordinate the investment in food storage facilities.
- Local Government Entities: Collaborate with the responsible entities to identify suitable locations and facilitate the implementation of food storage facilities.
- Community Foundations/Nonprofits (e.g., Alaska Community Foundation, AHFC, AFPC, Food Bank of Alaska)

Action and Implementation Timeline:

- Short-term (1-2 years)
- Mid-term (3-5 years)
- Long-term (5-10 years)

Year 1

- Months 1–8: Secure State, Federal, or foundation funding.
- Months 8–10: Identify and allocate funding to identified host organizations.
- Months 10–12: Host organization develops application and review process.

Year 2

- **Month 1–2:** 2-month application period launches (\$20,000,000 for projects between \$20,000-\$1,000,000)
- Months 3–6: 3-month application review and notification period
- Month 7: Funds are distributed, and projects begin
- Months 8–12: Host organizations prepares to launch the 2nd funding cycle and support current grantees

Year 3

- Month 1–2: 2-month application period launches (\$20,000,000 for projects between \$20,000-\$1,000,000)
- Months 3–6: 3-month application review and notification period
- Month 7: Funds are distributed, and projects begin
- *Months 8–12:* Host organizations support current grantees

Year 4

Month 7: Cycle 1, two-year grant cycle closes.

Year 5

Month 7: Cycle 2, two-year grant cycle closes

Assets or Resources Available:

In FY23, Food Bank of Alaska received \$6 million from the state legislature through DCCED to support infrastructure improvements to their network of food banks, pantries, meal programs, and other relevant community organizations. Despite the quick timeline for distribution, they received \$28 million in requests ranging from \$25,000 to \$1 million. There were many worthy projects that did not receive funding due to limited resources. This project would be easily replicable and the need for the funding has been well established.

State Funding Needs:

For a two-cycle grant program:

- Grant Funding: \$40,000,000
- Host organization overhead and administration cost: \$500,000

Statutory or Regulatory Changes:

No statutory or regulatory changes are needed.

Additional Research:

Research has been conducted and is available from the Food Bank of Alaska and the USDA Alaska mico-grant program. Further evaluation of Alaska Commercial Co. data is being conducted by UAA-ISER, and will be circulated within the FSTF final reporting period.

Metrics Recommended to Measure Progress:

• Increase in volume of food stored/available/on hand.

- Direct changes in food spoilage during transit, measured in volume, value, and nutritive losses. Preferably disaggregated by product type (e.g. produce) and by destination to identify performance by hub.
- Geographically distinct retail prices of food items with the greatest baseline rates of transit spoilage, to measure pass through of shrinkage reductions to consumer prices and therefore food affordability.
- Number of Alaskans benefited by infrastructure improvement projects / Per capita community reduction in food waste, as proxied by community population and quantity/value of products that are non-sellable on arrival in available local retail outlets"

- Research has been conducted and is available from the Food Bank of Alaska and the USDA Alaska mico-grant program.
- Grocery retailer data on spoilage rates may help identify the hubs where greatest losses are
 occurring, which may indicate the largest marginal benefit. Data on product level spoilage from
 2018-2022 was received from Alaska Commercial Co. and is being further processed. Additional
 grocery retailers may be tapped to increase sample size and coverage. Data should be expanded
 to be able to show absolute levels of spoilage ("lbs") as well as the rate of spoilage (% of shipped
 lbs) to ensure intervention changes are driven by reduced spoilage and not just fluctuations in
 shipping volumes.
- Carriers maintain transit data on Bypass Mail and freight shipments, so evaluation of improvements due to reduced transit time vs. better product quality maintenance (between flights) could be performed.
- Retail price collection has been tracked since 2023 by UAA-ISER but not yet reported. UAA-ISER
 discussions with WIC and SNAP programs are ongoing to recover historical disaggregated
 product-level prices (likely only since 2019, when EBT was mandated).

9. Recommendation: Extend Northern Rail

Transportation is a struggle in Alaska; it is costly to transport goods and products long distances to/from Alaska's farmers and ranchers. The option of rail line transport around the state would reduce costs and increase efficiency and reliable access to food products. The single project of the extension of the rail line to Fort Greely, with a siding in Delta Junction, would have an extremely significant impact on the agriculture industry.

The Northern Rail Line currently ends about 70 miles outside of Delta Junction, at Moose Creek. Equipment, fertilizers, etc. have to be offloaded either in Fairbanks or Moose Creek. This translates to hundreds of thousands of dollars spent hauling equipment, fertilizers, grain, etc. to/from Delta to the rail line. These high transport costs increase the price of the farmers' and ranchers' products for the consumer and reduce the capital these agriculture producers can invest back in their businesses to expand production.

Consider fertilizer. Large quantities are necessary for producing hay and grain. Four semi-trucks are equivalent to one rail car and require more fuel/energy than the one rail car. In addition, each semi requires two drivers per 24-hour period. Clearly there are many trips and high costs involved in hauling fertilizer from Moose Creek to the Delta Co-op via the highway rather than the railway.

This recommendation proposes to extend the Alaska Railroad to Fort Greely, with a siding in Delta Junction. A siding in Delta Junction would decrease travel and hauling on the road. Additionally, transporting heavy equipment by rail can save tens of thousands of dollars for each piece of equipment.

Responsible Entity/Entities:

• Alaska Railroad Corporation

Action and Implementation Timeline:

- Short-term (1-2 years)
- Mid-term (3-5 years)
- Long-term (5-10 years)

Action needs to start quickly to secure funding, evaluations, and easements, among other actions. Building the rail line will take several years, so action needs to happen in the next couple years to get this project moving.

Year 1:

- Potential NEPA Re-evaluation
 - Issues to resolve:
 - ROW over federal/military lands
 - Section lines
 - Decision for terminal facilities in Delta Junction

Once started, the Northern Rail Line expansion takes (at estimate) 5 years to complete.

Assets or Resources Available:

A plan has already been developed pertaining to the rail line near Delta Junction.

State Funding Needs:

Funding will need to be a combination of state and federal funds.

Statutory or Regulatory Changes:

N/A

Additional Research:

N/A

Metrics Recommended to Measure Progress:

- Decrease in expenses to farmers and ranchers
 - Note: This metric could rely on data from the Census of Agriculture.
- Reduction in cost differential of farm inputs, including large equipment, between receipt of products in Fairbanks, North Pole and Delta (direct data elicitation from retailers, e.g. AK Farmers' Co-op, Delta Industrial Service)
 - Note: Evaluating this metric is dependent on retailers agreeing to provide data.
- Increases in "Fairbanks" area 'net cash farm income of producers' [Table 4, NASS Ag Census Data, State and County Level]

Data:

See notes under section "Metrics Recommended to Measure Progress."

I. Statutory and Budget Needs Summary

Recommend	Statutory Changes	Regulatory Changes	Responsible Agency	Other Changes	Responsible Entity/Entities	Budget Needs
Create an AKDA	Significant Statutory Changes (can be done by Legislature or Governor)	Significant regulatory changes after department established	All Departments that have agencies moving into AKDA			More than \$20 million
Expand Leases on State-Owned Land				Require annual/regular review of Area Plans for ag lands	DNR Resource Assessment & Development Team	Indeterminate
Increase Research Capacity						\$43 million
Improve Access to Capital for Producers	Possible statutory changes to ARLF	Forgivable loan program regulations to start programs Possible ARLF regulatory changes	DNR			\$3 million for forgivable loan programs
Encourage Tax Exemptions for Farmland	Change farmland use statutes from percentage of income to \$1000 in sales and requirement to file schedule F. Remove or reduce requirement to pay back taxes. Possible additions to farm structure exemption			Local Government adoption	Local Governments	
Create AGMI	Establishing legislation	Necessary regulatory changes once established	DNR or DCCED			Startup funding - similar to ASMI: startup; funding for 2-3 FTE; advertising and public outreach; travel and office space.
Re-Establish Alaska Meat Inspection		Implementing regulations	DEC			Approximately \$600,000 (5-6 FTE)

Recommend	Statutory Changes	Regulatory Changes	Responsible Agency	Other Changes	Responsible Entity/Entities	Budget Needs
Add Technical Assistance Officer Position						\$165,000 (1 FTE)
Request Grocery Stores Track and Sell More AK Grown Products	Consider sales tax exemption for AK Grown at grocery stores		Meetings between Governor and grocery store executives			Dependent on the implementation of other programs.
Expand ARLF	Change AS 03.10.020(a)(1) to allow manufacturers to access ARLF loans	Changes to evaluate manufacturer applications, eliminate requirement for agriculture experience	DNR			Possible fund increase with more eligible applicants
Improve Maritime Infrastructure	Necessary statutes for port development and expansion	Necessary regulations for port development and expansion	DOT			Funding for feasibility study for improvements at Seward and Homer ports and rail expansion to Homer and Port Mackenzie. Funding for improvements based on study.
Decrease Rural Hub Food Loss	Evaluate statutes needs for construction, operation & leasing food storage facilities	Regulation to enable efficient implementation & use of facilities		Identify location and facilitation of storage facilities	Local governments	Funding for needs assessment, strategic plan, construction and implementation of facilities. Ongoing costs for any leases and necessary staffing
Improve Aviation Infrastructure		Possible regulatory changes related to FAA funds eligibility for runway extension	DOT			Funding for feasibility study, technical assessment, potential redundancy measure & improvements in AWOS system and runway condition reporting
Improve Bypass Mail Operations				Revisions to operational management of Bypass Mail program	USPS	

Recommend	Statutory Changes	Regulatory Changes	Responsible Agency	Other Changes	Responsible Entity/Entities	Budget Needs
Improve Data Collection & Analysis	Possible statutes for mandating reporting on key data (attempt through voluntary reporting first)					Funding for necessary staff hours for data collection. Funding for dashboard expansion & data hosting
Invest in Research and Innovative Technologies	Assess statute changes necessary for new technologies in temp controlled transportation & storage	Assess regulation changes necessary for new technologies in temp controlled transportation & storage				Funding for research & development, pilot projects. Funding for staff or research teams for management & implementation
Create Supply Chain Coordination Council	Establishing the Food Supply Chain Council	Regulations to operate Food Supply Chain Council	DCCED (Dept. of Ag upon creation)			Funding for 0.5 FTE in DCCED to manage Food Supply Chain Council
Increase Food Storage Capacity						\$40,000,000 grant funding and \$500,000 host org overhead & administration
Extend Northern Rail						Funding will need to be a combination of state and federal funds.

J. Conclusion and Next Steps

With Alaska's rich resources, this report demonstrates that it is possible to improve the self-sufficiency of the state in feeding residents through increased food production, processing, marketing, new as well as upgraded transportation infrastructure and increased food storage capacity made possible by increased access to capital, tax exemptions, state lands, private sector commitment, a heightened priority of agriculture in our executive and legislative branches via a department reorganization, coordination with shippers and retailers, increased research, data collection and analysis, and innovation and technology.

Despite all these opportunities in our great land, Alaska has many challenges and is currently food insecure. We depend too heavily on imports for the vast majority of food we consume. Too many Alaskans rely on charities and government programs to feed their families. Grocery store shelves in our state will too easily and quickly turn bare if our supply chain to the lower 48 is interrupted. Our agriculture industry produces only enough to feed a small percentage of our residents.

The Alaska Food Strategy Task Force has outlined solutions to overcome these obstacles and barriers and turn the tide. We must all as Alaskans come together in this effort. If families and communities, decision makers and partners, commit to a more secure food system – and if we remain persistent in our endeavors, we can achieve it.

The Alaska Food Strategy Task Force's recommendations in this report include action steps and are a ready launchpad toward greater food independence.

Please note that the Alaska Food Strategy Task Force will continue work in the year ahead to develop additional strategies to improve Alaska's food system even more. Members will form four committees for each of the remaining focus areas with a report due on August 1, 2024:

- enhancing the climate for food & beverage processing or distribution businesses,
- minimizing food waste and diverting it from waste stream,
- improving connectivity, efficiencies, and outcomes in state-run programs affecting food availability and access, and
- ensuring food security in all communities in the state, on and off the main road system.

K. Appendices

Appendix A: Glossary United States

USDA: United States Department of Agriculture

FAA: Federal Aviation Administration **NASS**: USDA National Agricultural Statistics

Service

SNAP: Supplemental Nutrition Assistance

Program

USPS: United States Postal Service

WIC: Special Supplemental Nutrition Program

for Women, Infants, and Children

State of Alaska

AKDA: Alaska Department of Agriculture

(Proposed)

DCCED: Alaska Department of Commerce, Community, and Economic Development

DEC: Department of Environmental

Conservation

DNR: Alaska Department of Natural Resources **DOH**: Department of Health and Social Services

DOLWD: Alaska Department of Labor and

Workforce Development

DOT&PF: Alaska Department of Transportation

and Public Facilities

OMB: Alaska Office of Management and Budget

State Programs and Services

AHFC: Alaska Housing Finance Corporation AIDEA: Alaska Industrial Development and

Export Authority

ARLF: Agricultural Revolving Loan Fund **ARRC**: Alaska Railroad Corporation **ASMI**: Alaska Seafood Marketing Institute

CSFP: Alaska Department of Health Commodity

Supplemental Food Program

AFSTF: Alaska Food Strategy Task Force **FSITF**: Food Security and Independence Task

Force

HB 298 AFLP: HB 298 Agricultural Forgivable

Loan Program

AGMI: Alaska Grown Marketing Institute

(Proposed)

University of Alaska

IANRE: University of Alaska Fairbanks - Institute of Agriculture, Natural Resources, and Extension SBDC: University of Alaska Anchorage - Alaska

Small Business Development Center **UAA**: University of Alaska Anchorage **UAA-ISER**: University of Alaska Anchorage -

Institute of Social and Economic Research **UAF**: University of Alaska Fairbanks **UA System**: University of Alaska System

Organizations

AFDF: Alaska Fisheries Development Foundation

AFMA: Alaska Farmers Market Association

AFPC: Alaska Food Policy Council

Other

AWOS: Automated Weather Observing System **BVLOS**: Beyond-visual-line-of-sight systems

FTE: Full-Time Employee SKU: Stock-Keeping Unit

Appendix B: HB 298 Bill⁷



LAWS OF ALASKA 2022

Source SCS CSHB 298(CRA) am S Chapter No.

AN ACT

Establishing forgivable loan programs for farm development and improvement and for certain meat processing facilities; relating to a program of state inspection for certain meat processing facilities; establishing the Alaska Food Strategy Task Force; and providing for an effective date.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

THE ACT FOLLOWS ON PAGE 1

Enrolled HB 298

-

⁷ https://www.akleg.gov/basis/Bill/Detail/32?Root=HB298

Appendix C: Resources and Links

- <u>Dunleavy Signs Bills Supporting Farming, Meat Processing Industries</u>
 - https://gov.alaska.gov/dunleavy-signs-bills-supporting-farming-meat-processing-industries/
- Security of the red meat supply in Alaska
 - https://www.adfg.alaska.gov/static/home/library/pdfs/wildlife/research_pdfs/10_paragi_eta
 l_security_red_meat_supply_alaska.pdf
- Building Food Security in Alaska
 - https://www.crcworks.org/akfood.pdf
- Minnesota Department of Ag Farm Opportunity Program
 - https://www.mda.state.mn.us/business-dev-loans-grants/farm-opportunity-loan-program
- Montana Wood Products Revolving Loan Program
 - https://business.mt.gov/Business-Assistance/Wood-Products-Revolving-Loan-Fund/
- <u>lowa Dept. of Agriculture and Land Stewardship</u>
 - https://iowaagriculture.gov/field-services-bureau/financial-assistance-conservation-practice
 s
- <u>Tennessee Agriculture Enterprise Fund</u>
 - https://www.tn.gov/agriculture/businesses/aef.html
- <u>Tennessee Agriculture Enhancement Fund</u>
 - https://www.tn.gov/agriculture/farms/taep.html
- 64 FR 37666 Designation of the State of Alaska Under the Federal Meat Inspection Act and the Poultry Products Inspection Act
 - https://www.govinfo.gov/content/pkg/FR-1999-07-13/pdf/99-17737.pdf
- Meat Inspection in Wyoming
 - https://wyoleg.gov/InterimCommittee/2020/05-20200601MeatInspectioninWyoming-JointAgPPT.pdf
- <u>State of Wyoming 2021-2022 Supplemental Budget Request</u>
 - https://www.wyoleg.gov/InterimCommittee/2020/02-20201207010-DepartmentofAgriculture.pdf
- HB 298
 - https://www.akleg.gov/basis/Bill/Detail/32?Root=HB298