

**04/01/16**

**OVERVIEW:  
BUILDING  
FOOD  
SECURITY  
IN ALASKA**

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BUILDING FOOD SECURITY IN  
ALASKA</SUBJECT><COMM>SRES29</COMM></TARGET>



*Growing greens with LED lights in the greenhouse at Chena Hot Springs —Photo © Ken Meter, 2014*

# **Building Food Security in Alaska**

By Ken Meter and Megan Phillips Goldenberg  
Crossroads Resource Center  
Minneapolis

July 28, 2014

Commissioned by the Alaska Department of Health and Social Services,  
with collaboration from the Alaska Food Policy Council

## How “Food Security” is Defined in this Report

**Food security** is commonly used by Alaskans to signify the security of the food supply from potential disruption due to weather incidents, flooding, war, breakdown of supply lines, etc.

Often the definition of “food security” in the Lower 48 is more focused on ensuring that low-income residents have a secure food supply. Increasingly this term has come to mean that low-income communities produce food for themselves.

In this report “food security” is used in the Alaska sense, captured best by University of Alaska researchers below.

“In the context that we use it here, food security describes more than merely whether sufficient food is being produced, or a one-size- fits-all food-nutrition relationship, and incorporates all of the various ways in which a food system supports health in its various biophysical, social, and ecological dimensions (Loring & Gerlach, 2009). These include matters such as the importance of certain foods, food choice, local perceptions of hunger, uncertainty and worry about food safety or shortages, and any other psychosocial, sociocultural, or environmental stresses that result from the process of putting food on the table (S. Maxwell, 2001).

In rural, predominately Alaska Native communities, for example, wild fish and game are important for food security, not just because they are readily available, but also because they are important to the preservation and transmission of traditions and cultural practices, for the maintenance of social networks and interpersonal relationships, and for supporting individuals’ sense of self-worth and identity (Fienup-Riordan, 2000; Loring & Gerlach, 2009; Loring, Gerlach, & Harrison, 2013)

## **Executive Summary**

The most critical concern Alaskans hold for the future of food is the security of its food supply. 95% of the \$2 billion of food Alaskans purchase<sup>1</sup> is imported — meaning \$1.9 billion leaves the state each year as Alaskans eat. Moreover, this food is shipped through long supply chains. Essential items arrive by airplane, barge, and truck from Mexico, Europe, Asia, and the Lower 48.

To name only one glaring example: Alaska Food Policy Council (AFPC) Town Hall participants expressed deep frustration that even when they want to purchase Alaska seafood, they discover it has been shipped to Seattle for processing, and then shipped back to their local market, so it hardly seems to be a local purchase any more.

### **Alaskans spend \$1.9 billion each year buying food produced outside of the state.**

Since both production and transportation of this imported food is energy-intensive, Alaskans expressed great concern that as the price of imported fuel rises, the state will face great difficulty in obtaining food for its people.

The main source of local food in the state of Alaska today is subsistence and personal use gathering — which together account for food worth about \$900 million per year. Most Alaskans catch some of the fish they eat, or give away or barter for meat hunted in the wilds. Yet for some rural villages, our sources said, subsistence accounts for 80% or more of the annual diet; for urban dwellers, the figure is more like 10%. Many Alaskans, both urban and rural, told us that as long as they can get ample supplies of wild foods, they would prefer not to buy meat and fish at the store: its quality is viewed as inferior. Yet many rural Alaskans have moved away from country foods toward store-purchased.

### **The main source of local food in the state of Alaska today is subsistence and personal use gathering.**

While Alaskans have long grown food for themselves, local agriculture has failed to realize the potential many had hoped it would attain. Early initiatives to become self-sufficient for food floundered. Larger efforts to develop agricultural settlements have failed to meet their founders' hopes. State funds to promote farm production have often spiraled into mismanagement. Some of the state's best farmland is now developed into urban areas.

Farmers consistently find that their costs of production are higher in Alaska due to higher living costs, and the need to transport essential inputs long distances from other places. Labor costs are also higher here. With the advent of air travel and more efficient trucking, it became less expensive to haul food from the Lower 48 to Alaska than to grow it here.

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<sup>1</sup> ISER calculates this total to be \$2.5 billion. The more conservative figure was used. Travelers in Alaska, of course, also purchase substantial amounts of food that are not included in these totals.

Today, supermarkets in Alaska feature many of the same gourmet foods that can be obtained in any urban area of the U.S. — yet with added delivery costs.

A once-thriving dairy industry has been decimated by imports from Washington State. Most Anchorage restaurants feature meat that was raised in the Lower 48. The state's hopes to mount a barley industry confront the reality that farmers in the Lower 48 can produce the grain at one-quarter of the cost of Delta Junction farms.

**With the advent of air travel and more efficient trucking, it became less expensive to haul food from the Lower 48 to Alaska than to grow it here. This makes the state deeply dependent on oil for its food supply.**

More than \$2 billion of seafood is exported to distant markets, increasingly Japan and China. The processors who add value to the harvest are often located in Seattle, so Alaska obtains less benefit from its own seafood than it deserves.

Food is a \$5 billion business in Alaska, yet one that supplies food to outside vendors and imports food from outside vendors. Our sources could count only a half dozen manufacturers that focus their efforts on feeding Alaskans.

Meanwhile, the Native population that once so effectively fed itself finds itself caught up in a changing society. As Natives have adopted a processed-food diet, many have had health troubles. External changes (rising fuel costs, changing weather, flooding, bad ice, changing migration patterns) are making it difficult for families to harvest traditional foods. Hunger has become a larger concern. Native youth are less likely to gain skills in subsistence harvesting.

**Small farms have begun to offer foods directly to nearby consumers. The \$2.2 million of food that these farmers sell rivals the value of the state's potato crop, the state's third-most important food product. Direct sales rose 32% over the past five years, and now run at 13 times the national average.**

Yet Alaskans have been intrepid in coping with these changes. Small farms have begun to offer foods directly to nearby consumers. The \$2.2 million of food that these farmers sell rivals the value of the state's potato crop, the state's third-most important food product from farms, after vegetables and miscellaneous livestock. Direct sales rose 32% from 2007 to 2012, running at 13 times the national average.

Yet these national averages include all farm commodities raised in each of the states; since Alaska farmers produce only \$11.8 million of food that is destined for human consumption, direct sales bring in *one of every five dollars* earned by farmers who grow food for humans.

**Direct sales bring in one of every five dollars earned  
by farmers who grow food for humans.**

Community initiatives to expand gardening programs, convey food growing, processing, and cooking skills, and patient efforts to reintroduce traditional foods have flourished as Alaskans take steps to secure a more certain food supply. USDA states it has given out \$4 million in grants to Alaskans who build high tunnels to grow food. Several greenhouses operate using surplus heat from a nearby building, or hot spring. Farmers across the state are launching boldly innovative farms. Fishers are selling high-quality fish direct to customers in Alaska cities. The state has allocated millions of dollars so schools could buy Alaska grown products. Manufacturers are focusing on markets in Alaska.

Many of these initiatives have emerged because someone with considerable means spent their own money to create innovation. Others have relied upon public funds or foundation grants to launch program. Hundreds more operate at a low level, using sparse resources.

Significantly, the most successful of these efforts have been small in scale. All would be stronger if Alaska created lasting infrastructure to support local foods. This is a necessity, since food transportation routes have been an afterthought in state planning: at first these routes were dictated by the mining industry, and now by public investment in highways, railroads, and airports.

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infrastructure to support local foods.**

Small steps could have important impact. If Alaska wanted to ensure that its entire population could eat Alaska-grown produce, the state could set aside 4,700 acres for all the potatoes that would be needed, 200 acres for carrots, 200 more acres for cabbage, and 600 acres for lettuce.

This emergent activity must be supported by the state of Alaska. We recommend the following key steps:

- Foster subsistence harvesting and related skills
- Build personal capacities in agriculture
- Expand agriculture and gardening
- Build infrastructure that supports local food production
- Adopt state policy that supports local food production
- Focus consumer attention on staying loyal to Alaska-grown food
- Expand food processing and manufacturing for in-state markets
- Strengthen internal food distribution networks
- Strengthen statewide transparency and coordination

More details on these steps will be found in the Recommendations section, page 141.

## **Recommended Actions with Measures of Success**

By Ken Meter and Megan Phillips Goldenberg

*Part of a report, "Building Food Security in Alaska"  
for the Department of Health and Social Services and the Alaska Food Policy Council*

### **A. Foster Subsistence Harvesting and Related Skills:**

1. Subsistence foods are a key piece of Alaska's food system. They provide important benefits to Alaskans related to nutrition, health, culture, and economic growth.
2. Alaskans must diligently protect the ecosystems on which we all depend, and wildlife of all kinds, especially those fish, animals, and birds that are central to subsistence gathering. Although it is unlikely that enough wildlife live in or near the state to feed the entire population should economic conditions become dire, this is far and away the most significant food source in Alaska that currently feeds Alaska residents.
3. Organizations representing Alaska Native communities should play a strong role in co-management of wildlife resources. The current subsistence management structure with State and Federal managers faces many challenges. The experiment in co-management currently underway in Copper River, through the Alaska Federation of Natives, should yield essential insight into the potential for tribal community councils to play a more central role in managing wildlife. It seems likely that those who live in a specific place, drawing upon a long heritage and deep cultural insights, have more integrated knowledge than specialists who focus only on one aspect of the natural system. Interdisciplinary teams involving scholars, public officials, and residents may also play a useful role.
4. Programs such as "Store Outside Your Door" and Alaska Native Cultural Camps that help cultivate skills in gathering, storing, and preparing wild foods should be encouraged.
5. Identify barriers and proposed solutions to continued access to subsistence resources, such as the cost of fuel, State and Federal regulatory challenges, etc.

#### *Measures of success:*

- Number of wildlife co-management processes that expand the roles of Native leaders.
- Satisfaction of tribal and village officials with co-management processes.
- Number of participants in programs, events, and workshops that teach subsistence skills.

### **B. Build Personal Capacities in Agriculture:**

1. By 2034, every graduating high school senior shall hold basic skills in gardening, foraging, composting, safe handling, food preparation, and storage.

2. A culture of food production should be nurtured that brings Alaskans together to learn about growing, gathering, preserving, preparing, and savoring good food, to celebrate seasonal foods and natural cycles, and to form social bonds across generations that celebrate place. It is this basic awareness of, and connection to, food production, combined with a strong sense of community connection, that will do the most to promote economic growth and self-reliance, prevent obesity, reduce food-related health impacts, and achieve food security.
3. The State should allocate funds to ensure that food banks and other organizations that serve low-income Alaskans can encourage their constituents to build economic opportunity for themselves by producing and processing foods for their Alaska neighbors.
4. The State, through community and technological colleges, land grant universities, land trusts, and other nonprofit organizations, should support and sponsor ongoing initiatives to train new farmers in commercial production of food for Alaska markets.

*Measures of success:*

- Percent of high school graduates who hold documented skills in gardening, foraging, composting, safe handling, food preparation, and storage.
- Number, locations, and participant counts for local food-oriented celebrations.
- Number of new farmers who graduate from food production training programs with business plan and start-up capital in hand.
- Number of new farmer programs created or communities served by such programs.

**C. Expand Agricultural Production and Gardening:**

1. Devoted efforts must be made to improve soil quality by converting organic materials into soil fertility — including recycling of food scraps in urban areas, re-use of spent hay or straw, harvesting of seaweed, shellfish bones, egg shells, and other suitable materials, so the State can reduce its dependency on imported farm inputs. By 2025, all organic wastes should be put to productive use.
2. Support existing federal programs that help gardeners and farmer invest in high tunnels, greenhouses, and other season-extension technologies (including year-round indoor production facilities). State funding should be made available to partner with these programs so that residents in all Alaskan communities can produce more food, create jobs, and provide more healthy, local food choices.

*Measures of success:*

- Percent of organic waste in Alaska cities that is recycled into compost or similar source of fertility.
- Percent of rural villages that have season-extension capacity suitable to produce food for local residents.

**D. Build Infrastructure that Supports Local Food Production:**

1. Food caches should be created across the state, providing safe and secure spaces to store healthy food during winter months and for emergency preparedness year-

- round. These should emphasize traditional storage techniques that use little fossil fuel energy, and storage of Alaska-grown root crops should be a priority.
2. Food production “nodes:” Local level washing, packing, storage, and distribution facilities, should be funded through a competitive grant program open to any community-based food production initiative.

*Measures of success:*

- Number of food caches developed, diversity and quantity of food stored.
- Funds allocated by the State of Alaska to invest in local-foods infrastructure at the community level.

**E. Adopt State Policy that Supports Local Food Production:**

1. The Nutritional Alaskan Foods in Schools program should receive continued and sustainable funding.
2. Farm-to-school programs should receive adequate and sustainable funding.
3. Grants and loans should be made available to Alaskans who wish to install agricultural production facilities that run on renewable energy produced in Alaska, including waste or surplus heat from nearby buildings, hot springs, etc.
4. Food production lands should be set aside in and near Anchorage, Fairbanks, Haines, Kodiak, Juneau, Sitka, and other cities to ensure that fertile acres are spared from development, and continue to be available for helping feed urban populations.
5. Farm land that the State of Alaska is opening up in the Nenana-Totchaket should be developed with a high priority for raising food for delivery to remote villages across the state. In order to reduce development pressure on the land, to retain the rural landscape, foster community life, and to ensure that land is affordable to farmers, the state should hold land prices to levels that are commensurate with a farmer’s ability to produce food, either through easements or leases.

*Measures of success:*

- Dollars appropriated by the Alaska Legislature to ensure Alaska grown foods are served in institutional food service programs; percent of total demand represented by these purchases.
- Other incentives for state procurement of local food, such as the bidder’s preference for Alaska Grown, are supported and implemented by the State of Alaska.
- Acres of land near urban areas set aside for permanent agricultural use.
- Percent of total demand for food in rural villages that is produced in Nenana farm development and purchased by consumers in remote locations.

**F. Focus Consumer Attention on Staying Loyal to Alaska Grown Food:**

- The State should engage in intensive and long-term marketing campaigns to leverage its prior investment in the Alaska Grown program.

- Marketing campaigns that combine food and health, such as the “Eat Five, Buy Five” campaigns launched in other states (eat five fruits and vegetables per day; buy five dollars of food from an Alaska farm each week) will help prevent obesity.
- These campaigns should also remind Alaska consumers which products are in season during harvest months.

*Measures of Success:*

- Number of new campaigns established to promote food, health, and locally grown foods.
- Dollars of private and public money raised to carry out these campaigns.
- Impacts of these campaigns.

**G. Expand food processing and manufacturing for in-state markets:**

1. By working in collaboration with farmers, chefs, and other food system stakeholders, Department of Environmental Conservation (DEC) should expand the review of state food safety regulations with a mission of enabling as much local food production and processing as can safely be created. This would extend work previously accomplished through the Cottage Foods program. Revised regulations should be simplified, scaled appropriately for small and mid-size growers so they do not serve as impediments to earning a living as a farmer raising safe foods, and should be kept low-cost.
2. The State should allocate money for community kitchens in or near low-income areas where residents may learn basic food preparation, processing, and cooking skills; create a small business opportunity by producing food items for local use; or successfully aggregate food items for sale to larger markets.
3. The State should support through loans and technical assistance individual entrepreneurs who invest in and manage community-based food initiatives, with a priority on projects that provide Alaska-grown food to Alaska residents.

*Measures of success:*

- In an annual survey of food-business startups, the percentage of respondents who believe that food-safety requirements are cost-effective, appropriate to the scale of their business, and transparent.
- Number of commercial kitchens open to resident use in urban Alaska; percentage of operating expenses that are covered through operational revenue.
- Value of foods that are processed in existing and new food businesses that are sold to Alaska household consumers.
- Percent of State food production/infrastructure loans that are repaid.

**H. Strengthen internal food distribution networks:**

1. The State should invest economic development funds in *creating local efficiencies* in food distribution. This would include creation of strong local food transportation routes.
2. The State should allocate funds for food banks that choose to make use of their food-handling expertise and logistical capacities to source locally grown food to low-income residents. Through such initiatives, food banks may play a significant role in creating more robust food systems across Alaska.

*Measures of success:*

- Value of farm products that are delivered to in-state public institutions from Alaska farms (for each farm) by each market channel (direct, through wholesaler, or other intermediaries, processors, etc.).

**I. Strengthen statewide transparency and coordination:**

1. The Alaska Food Policy Council should compile a resource library containing key studies covering the potential for local foods, and related themes; and compile comprehensive data sets that allow APFC to monitor prevailing conditions and evaluate success of local foods efforts. Ongoing evaluation of local foods investments should be coordinated on a statewide basis; without drawing funds away from local foods implementation.
2. In collaboration with other agencies, educators, and organizations statewide, AFPC should convene meetings of local foods leaders statewide at least once per year.
3. AFPC should raise funds to offer small research or “emerging opportunity” grants to entrepreneurs, farmers, small processors, scholars, and others who wish to test a new idea. In exchange for funding, recipients would make their findings public. This would not be academic research, but rather practical applications.

*Measures of success:*

- Number of Alaska food leaders who convene in annual meetings.
- Diversity of these participants (Native/nonnative, rural/urban, academic/community, etc.)
- Value of research/emerging opportunity grants that are given to Alaska community foods initiatives.
- Unexpected outcomes and new insights gained from these convenings and research opportunities.

## **Biographies of Principal Researchers**

**Kenneth A. Meter**, MPA, president and principal executive officer of Crossroads Resource Center, holds 43 years' experience in inner-city and rural community capacity building. As one of the most experienced food system analysts in the U.S., he integrates market analysis, business development, systems thinking, and social concerns. He has performed statewide food-system assessments for South Carolina (for the state departments of agriculture and commerce); Pennsylvania (for the Pennsylvania Association for Sustainable Agriculture); Mississippi (for Winrock International and the Mississippi Food Policy Council) Indiana (for the Indiana State Department of Health); for Ohio (University of Toledo Urban Affairs Center); and Minnesota (Blue Cross Blue Shield Center for Prevention). His "Finding Food in Farm Country"<sup>TM</sup> studies have promoted local food networks in 100 regions in 36 states and the Canadian province of Manitoba. He is currently engaged with a national team convened by Colorado State University to produce a USDA toolkit for measuring economic impacts of community foods initiatives. He also served as a consultant to the Illinois Public Health Institute, measuring the economic impacts of institutional food purchasing, under a contract from the Centers for Disease Control and Prevention. He previously studied agricultural policy in Alaska. As coordinator of public process for the City of Minneapolis Sustainability Initiative, he guided over 85 residents in creating a 50-year vision for the city including sustainability measures. He served as an advisor for the USDA Community Food Projects including managing the proposal review panel, and serves as a contributing editor to the *Journal of Agriculture, Food Systems, and Community Development*, where he has written about local economic multipliers. He has written in-depth literature reviews covering economics of size, and serves as a reviewer for three academic journals internationally. Meter convened and co-chaired the Community Economic Development Committee for the former Community Food Security Coalition. He has worked extensively on community development issues in inner-city settings. Meter taught economics at the University of Minnesota, and at the Harvard Kennedy School. He is an Associate of the Human Systems Dynamics Institute, and serves as a member of the Systems Technical Interest Group of the American Evaluation Association. He has given over 400 presentations across the U.S. and internationally on local foods issues.

**Megan Phillips Goldenberg, MS**, Associate at Crossroads Resource Center and Principal of New Growth Associates, is most interested in the intersections of public policy, food systems, and community development. She endeavors to work in an outreach and community building capacity in order to create and maintain a sense of place through better science and informed decision-making. Megan holds a Master's degree in Agricultural and Natural Resource Economics from Colorado State University. Her coursework emphasized Public Policy and Community Economic Development. Through her graduate research, Megan worked with Be Local Northern Colorado, the Northern Colorado Regional Food System Assessment, Boulder County's Building Farmers Market Track program, and the Building Farmers in the West Beginning Farmer and Rancher Development Program. She then worked for WPM Consulting in Boulder, Colorado as a Food Systems and Policy Associate. At WPM Consulting, she assisted with the development and initial execution of the Colorado Food Systems Advisory Council and provided research support for three county and three regional food system assessments (including metro Denver and rural Colorado) while facilitating community projects focused on increasing healthy eating and active living through sound policy and planning. In her spare time, Megan co-founded and co-directed The Growing Project, a 501(c)(3) nonprofit that promotes the value of a strong, diverse, and just local food system to all residents of Northern Colorado through direct agricultural experiences, education, and advocacy.

## List of People Interviewed

<b>First</b>	<b>Last</b>	<b>Organization</b>	<b>Location</b>
Brian	Adams	Photographer	Anchorage
Leif	Albertson	UAF Extension	Bethel
Tim	Andrew	Assoc. of Village Council Presidents	Bethel
George	Apataki	Subsistence hunter	St. Lawrence Island
River	Bean	Farmer	Palmer
Sarah	Bean	Farmer	Palmer
Jennifer	Becker	Pioneer Produce of the North Pole	Fairbanks
Carolina	Behe	Inuit Circumpolar Council Alaska	Anchorage
Suzan	Benz	NASS Alaska	Anchorage
Desiree	Bergeron	Alaska Native Tribal Health Consortium	Anchorage
Andrea	Bersamin	Center for Alaska Native Health Research	Homer
Kenny	Brunette	Ryan Air / Northern Air Cargo	Nome
Zachariah	Bryan	Tundra Drums	Bethel
Nate	Burrell	Mat Valley Meats	Anchorage
Ed	Buyarski	Edible Landscaping	Haines
John	Campabello	Middle Way Restaurant	Anchorage
Patricia	Campabello	Middle Way Restaurant	Anchorage
Ralph	Carney	Alaska Chip Company	Anchorage
Laura	Cole	Kitchens of Camp Denali	Denali
Danny	Consenstein	Director, Alaska Farm Services Admin.	Palmer
Kate	Consenstein	Alaska Seafood Marketing Institute	Anchorage
Eric	Cook	Chena Hot Springs greenhouse (grower)	Chena
John	Dart	Manley Hot Springs Produce	Manley Hot Springs
Alex	Davis	Farmer	Palmer
Jacob	Davis	Middle Way Restaurant	Anchorage
Ann	Davis	Reindeer herder	Nome
Bonnie	Davis	Reindeer herder	Nome
Timothy	Doebler	UAA - Culinary Arts, Hospitality, Diet	Anchorage
Rachel	Donkersloot	Alaska Marine Conservation Council	Anchorage
Chris	Dubois	Artic Roots Farm	Fairbanks
Cara	Durr	Alaska Food Coalition	Juneau
Toni	Ellingworth	Norton Sound Health Corp.	Nome
Johnny	Ellis	State Senator	Juneau
Cecil	Ellsworth	Entrepreneur	Wasilla
Mike	Emers	Rosie Creek Farms	Fairbanks
Julie	Emslie	Fairbanks Econ. Devel. Corp.	Fairbanks
Oliver	Evans	Charlie's Produce	Anchorage
Eddie	Ezelle	Mat-Su Food Bank	Wasilla
Joshua	Faller	Alaska Pacific University	Palmer
Gary	Ferguson	AK Native Tribal Health Consortium	Anchorage
Greg	Finstad	Dir., Reindeer Research Center UAF	Fairbanks
Ed	Fogels	Alaska DNR; Governor's Working Group	Juneau
Rose	Fosdick	VP Natural Resources, Kawerak	Nome

<b>First</b>	<b>Last</b>	<b>Organization</b>	<b>Location</b>
Wally	Frank	Angoon Community Council	Angoon
Kevin	Frank	Angoon Community Council	Angoon
Tracy	Gagnon	Sitka Fish to School	Sitka
Adam	Galindo	Owner, Taco Loco Products	Anchorage
Dan	Gillikin	Kuskokwim Native Assoc.	Aniak
Tom	Gray	Reindeer Herders Assoc.	Nome
Louis	Green	Gardened at warm springs	Nome
Bryant	Hammond	Kawerak	Nome
Michael	Hanzuk	Alaska Dept. of Commerce	Anchorage
Kevin	Harnter	U.S. Postal Service	Washington DC
Pamela	Hatzis	La Bodega	Anchorage
Lia	Heifitz	Food systems researcher	Juneau
Bree	Hockersmith	The Bridge	Anchorage
Jason	Hoke	Director -- Copper Valley Development	Copper Valley
Patrick	Hoogerhyde	The Bridge	Anchorage
Albert	Howard	Angoon Community Council	Angoon
Ken	Hoyt	SEARHC	Wrangell
Winona	Huffman	(Tula)	Nome
Paul	Huppert	Palmer Produce	Palmer
Melissa	Hyer	Bear Tooth Café	Anchorage
Natalie	Janika	Bear Tooth Café	Anchorage
Bill	Johnson	Johnson's Family Farm	Fairbanks
Erik	Johnson	Division of Agriculture	Anchorage
Albert	Johnson	Norton Sound Econ. Devel. Council	Nome
Sandra	Johnson	Alaska State Library Historical Collection	Juneau
Donna	Jones	Eggs to Elders program	Igiuig
Seth	Kantner	Fisher, gardening instructor, writer	Kotzebue
Bernie	Karl	Chena Hot Springs	Chena
Miriam	Karlsson	UAF School Nat Resources	Fairbanks
Rob	Kinneen	Snowglobe LLC; Fresh 49	Anchorage
Carolyn	Kinneen	Fresh 49	Anchorage
Marylynne	Kostick	Alaska Dept. of Fish & Game	Anchorage
Betsy	Kunibe	Anthropologist	Juneau
Will	Kyzer	Anchorage Econ. Devel. Corp.	Anchorage
Lorinda	Lhotka	Alaska Dept. Environmental Conservation	Fairbanks
Bob	Lochmann	U.S. Postal Service	Anchorage
Dan	Martin	Wild Ovens (bakery)	Juneau
Bill	Matthews	ANICA	Nome
Pete	Mayo	Spinach Creek Farm	Fairbanks
Lynn	Mayo	Spinach Creek Farm	Fairbanks
Chris	McDowell	McDowell Group	Juneau
Mike	McNally	Alaska Commercial Co.	Nome
Nancy	Mendenhall	Retired UAF official	Nome
Vera	Metcalf	Walrus Commission	Nome

<b>First</b>	<b>Last</b>	<b>Organization</b>	<b>Location</b>
Tim	Meyers	Meyers Farm	Bethel
Michael	Miller	Food Bank of Alaska	Anchorage
Nick	Mink	Sitka Salmon Shares	Sitka
Matt	Moser	Office of Sen. Ellis	Juneau
George	Nelson	Angoon Community Council	Angoon
Christine	Nguyen	Office of Economic Development	Anchorage
George	Noongwook	Whaling Commission	St. Lawrence Isl.
Joe	Orsi	Farmer	Juneau
Maria	Papp	Bender Mountain Farm	Fairbanks
Jo	Papp	Bender Mountain Farm	Fairbanks
Audrey	Paule	Summit Spice & Tea	Anchorage
Heather	Payenna	King Island Native Community	Nome
Benjamin	Payenna	King Island Native Community	Nome
Micah	Phillips	United States Coast Guard	Alameda, CA
Jeannie	Pinkleman	Delta Meats	Fairbanks
Heidi	Rader	UAF Extension & Tanana Chiefs Conf.	Fairbanks
Paul	Raphael	Subsistence hunter	Emmonak
Leo	Rasmussen	Former Mayor	Nome
Tyler	Rhodes	Norton Sound Seafood Products	Nome
John	Ross	Seamonster Seafoods & Sweet Meats	Juneau
David	Rupert	U.S. Postal Service	Denver
Lisa	Sadleir-Hart	Dietician	Sitka
Rhonda	Sargent	UAF Extension	Bethel
Lisa	Sauder	Bean's Cafe / Children's Lunchbox	Anchorage
Gay	Sheffield	UAF Coop Extension Nome	Nome
Christie	Shell	Calypso Farms & Ecology Center	Fairbanks
Sarah	Shimer	Inst. For Circumpolar Health Studies	Anchorage
Milan	Shipka	UAF Extension	Fairbanks
Tim	Smith	Raises salmon in warm springs	Nome
Darren	Snyder	UAF Extension	Juneau
Cassandra	Squibb	Copper River Salmon	Anchorage
Bill	St. Pierre	HomeGrown Market	Fairbanks
Brad	St. Pierre	Fairbanks Coop Market	Fairbanks
Sky	Starkey	Attorney	Bethel
Jim	Stotts	Inuit Circumpolar Council Alaska	Anchorage
Ernie	Swanson	U.S. Postal Service	Seattle
Linda	Swarner	Kenai Peninsula Food Bank	Soldotna
Megan	Talley	Alaska Pacific University	Palmer
Geran	Tarr	State Representative	Juneau
Cheryl	Thompson	Garden instructor	Nome
Andrew	Thoms	Sitka Conservation Society	Sitka
Dave	Thorne	Delicious Dave Thorne	Anchorage
Roberta	Townsend	Kodiak Archipelago Rural Leadership	Kodiak

<b>First</b>	<b>Last</b>	<b>Organization</b>	<b>Location</b>
Kathi	Tweet	UAF Coop Extension Nome	Nome
Kari	Vandelden	UAF Cooperative Extension Service	Nome
Ben	VanderWeele	VanderWeele Farms	Palmer
Francois	Vecchio	Francois Vecchio Meats	Anchorage
Libby	Watanabe	SEARHC	Juneau
Carlyle	Watt	Fire Island Bakery	Anchorage
Jon	Wehde	NW Arctic School District-Kotzebue	Kotzebue
Jeff	Werner	Chena Hot Springs greenhouse	Fairbanks
Tom	Williams	Farmer	Palmer
Cameron	Willingham	UAF School Natural Resources	Fairbanks
Susan	Willsrud	Calypso Farms & Ecology Center	Fairbanks
Keith	Wilson	Commercial fisherman	Naknek
Travis	Woodbury	Angoon Community Council	Angoon
Fritz	Wozniak	Huffman Ranch	Fairbanks
Bryce	Wrigley	Farmer; Alaska Farm Bureau	Delta
Louisa	Yanes	AK Farmland Trust	Palmer
Tom	Zimmer	Calypso Farms & Ecology Center	Fairbanks
Allen	Zuboff	Angoon Community Council	Angoon
		Hanson's Grocery	Bethel
		Sullivan's Grocery	Bethel
		Alaska Commercial	Bethel

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- Rob and Carolyn Kinneen
- Elanor Bomstein
- Nick Wojciak



# Alaskans Feeding Alaska

Bryce Wrigley  
CEO, Co-owner of Alaska Flour Company  
Alaska Farm Bureau President

Senate Resources Committee  
April 1, 2016

# Vulnerability



- 90 day supply in bins, feedlots, and storage bins
- Balanced diet
- Incorporate local food into the food system



Food Security

# How much do we need?

Food	90 Day Supply	Current Production
Spuds	1200 acres	560 acres
Carrots	50 acres	46
Milk	28M pounds	3.3M pounds
Grains	12,000 acres	200 acres
Red Meat	13M pounds	1.1M pounds
Poultry	9.75M pounds	25K pounds

# Economics



# Economics

- \$3 Billion on food
- 95% imported
- $\$3B \times 25\% = \$750M$
- 2016 Oil Production Revenue ~ \$799M including investments

Multiplier – 2.13

750M adds \$1.6B to economy

# Opportunities

95% - opportunity for entrepreneurs

Clean seed export

Alaska Branding

Rural development

Stabilize communities

Increase food security

Diversify Alaska's economy





# Impact

If each person spent \$5 of week on  
local food it would equal \$187  
Million a year

# Recommendations

- Ag friendly policies
- PR campaign
- State food purchases



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of the people that call in to  
this column.

To all you hunters who  
kill animals for food,  
shame on you; you ought  
to go to the store and buy  
the meat that was made  
there, where no animals  
were harmed.

I am calling in regard to  
the Speakout. I am an avid

# Alaska Food Coalition



*Sarra Khlifi, AFC Manager*



Statewide group of roughly 120 non-profit, faith-based and state agencies, including:

- *Catholic Social Services*
- *Food Pantry of Wasilla*
- *Fairbanks Community Food Bank*
- *Willow United Methodist Church*
- *Bean's Café*
- *Bristol Bay Regional Food Bank*
- *Love INC*
- *Kenai Peninsula Food Bank*
- *Food Bank of Alaska*
- *Valdez Food Bank*
- *New Hope on the Last Frontier*
- *Yakutat Tlingit Tribe*
- *Kodiak Island Food Bank*
- *Wasilla Area Seniors*
- *Chuathbaluk Traditional Council*
- *Homer Community Food Bank*
- *United Way of Anchorage*
- *Southeast Alaska Food Bank*
- *APU Spring Creek Farm*
- *Cooperative Extension Service*
- *Calypso Farm and Ecology Center*
- *Alaska School Nutrition Association*
- *Covenant House Alaska*
- *Breadline Inc./Stone Soup Café*

# What We Will Cover

- Food Insecurity definitions and data, causes and correlations
- Changing Face of Hunger – client demographics
- Programs available to address hunger in Alaska
- Food Insecurity and Health Factors

# Food Insecurity and Hunger



## □ **What Is Food Security?**

- Food security for a household means access by all members at all times to enough food for an active, healthy life. Food security includes at a minimum:
  - The ready availability of nutritionally adequate and safe foods.
  - Assured ability to acquire acceptable foods in socially acceptable ways (that is, without resorting to emergency food supplies, scavenging, stealing, or other coping strategies).

## □ **...and Food Insecurity?**

- Food insecurity is limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways.

# Defining Food Security



USDA's labels describe ranges of food security

- Food Security
  - High food security (old label=Food security): no reported indications of food-access problems or limitations.
  - Marginal food security (old label=Food security): one or two reported indications—typically of anxiety over food sufficiency or shortage of food in the house. Little or no indication of changes in diets or food intake.
- Food Insecurity
  - Low food security (old label=Food insecurity without hunger): reports of reduced quality, variety, or desirability of diet. Little or no indication of reduced food intake.
  - Very low food security (old label=Food insecurity with hunger): Reports of multiple indications of disrupted eating patterns and reduced food intake.

# Who is hungry in Alaska?

104,750

Alaskans, or  
14.2%, are  
food insecure

37,590 or

20% of  
Alaskan  
children are  
food insecure



Overall



Food Insecurity Rates

4-14%

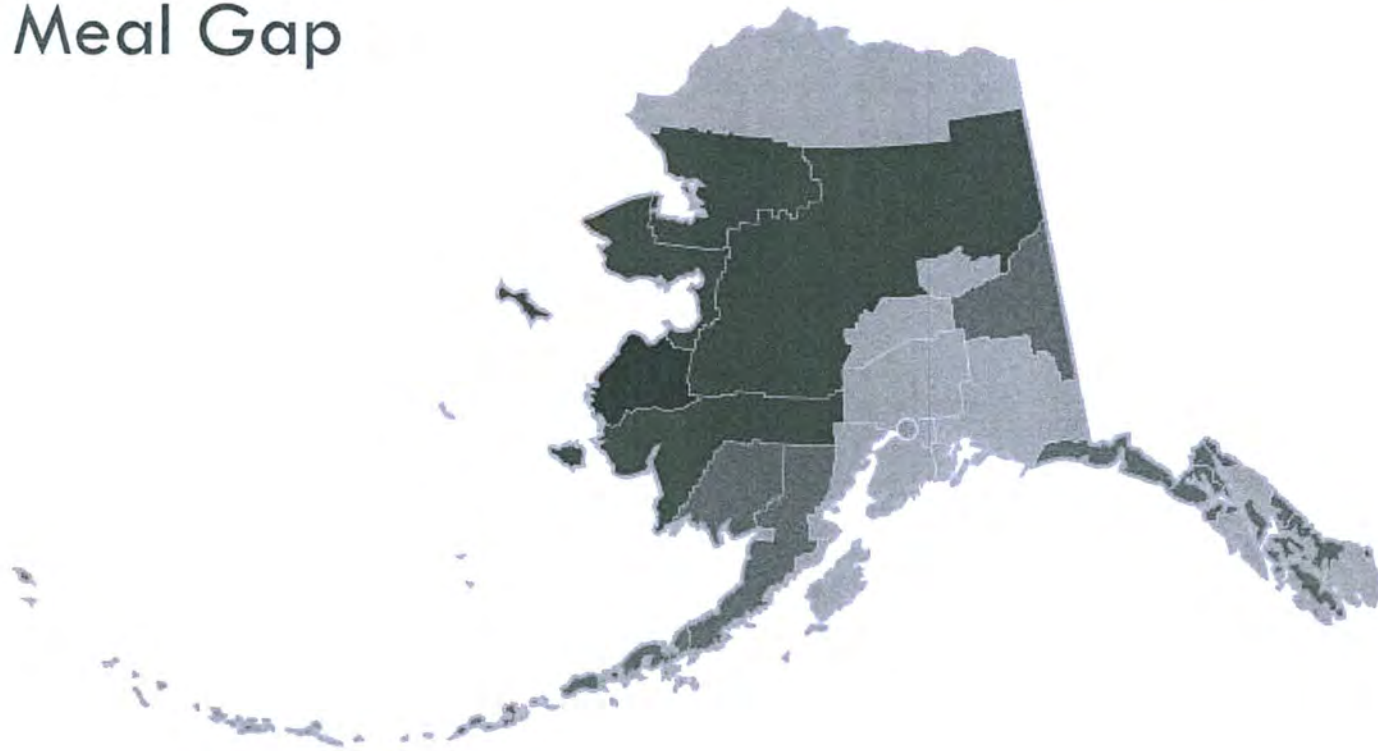
15-19%

20-24%

25-29%

30% +

# Map the Meal Gap



County > 2013 > Overall > Alaska



**FOOD INSECURE PEOPLE**

104,750



**FOOD INSECURITY RATE**



14.2%

**ESTIMATED PROGRAM ELIGIBILITY AMONG FOOD INSECURE PEOPLE**



40%	Above Other Nutrition Program threshold of 185% poverty
19%	Between 130%-185% poverty
41%	Below SNAP threshold 130% poverty

Child



Food Insecurity Rates

4-14%

15-19%

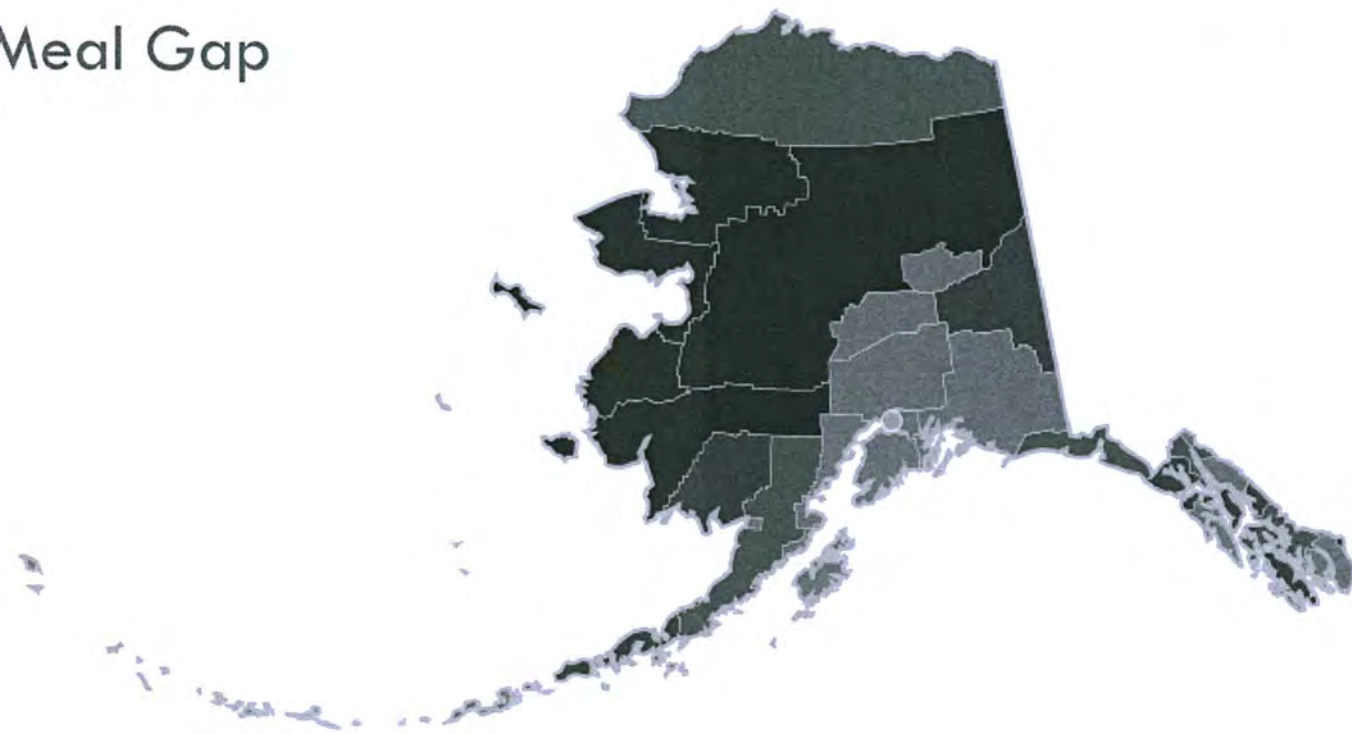
20-24%

25-29%

30% +



# Map the Meal Gap



County > 2013 > Child > Alaska



**FOOD INSECURE CHILDREN**  
37,590



**FOOD INSECURITY RATE (OVERALL)**



**FOOD INSECURITY RATE (CHILD)**



**ESTIMATED PROGRAM ELIGIBILITY AMONG FOOD INSECURE CHILDREN**



40% Likely ineligible for federal nutrition programs (incomes above 185% of poverty)

60% Income-eligible for nutrition programs (incomes at or below 185% of poverty)

# 2014 Hunger Study

- Aims to learn who is seeking food assistance – demographic information on current clients and certain information about programs offered in our network
- Best source of data on the details of who is hungry in Alaska
- Methods: Feeding America utilized USDA's definitions of food security and Economic Research Service questions



# 2014 Hunger Study – Changing Faces of Hunger

- Who Are We Serving? 1 in 5 Alaskans turn to our network for help each year. Including:
  - ▣ 155,000 Alaskans served annually
  - ▣ 32% children under 18
  - ▣ 13% seniors aged 60 and older
  - ▣ 23% of households include at least one veteran
  - ▣ 3% are currently serving in the military



# Changing Face of Hunger

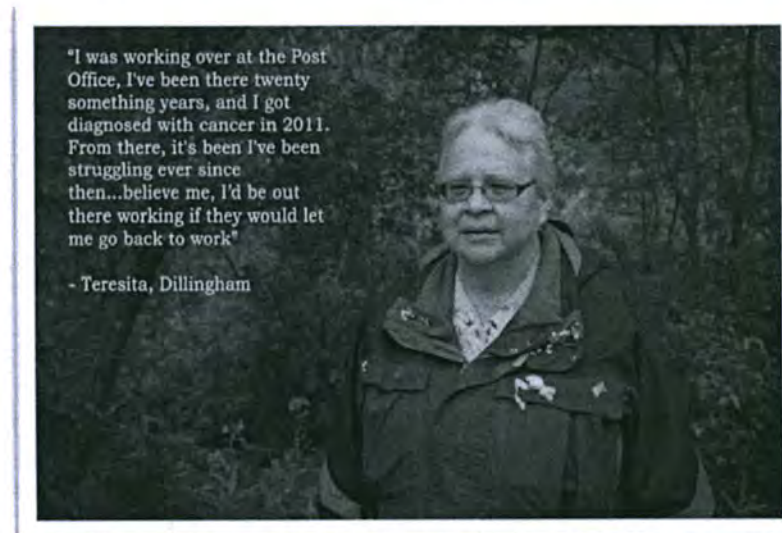


- **Many hungry people are part of the “working poor:”** 60% worked for pay in the last 12 months. Of those not working, 21% are retired and 69% cannot work due to disability.
- **What was once emergency is now chronic:** 66% of Alaskans using our partner food distribution network tell us that they expect to keep needing food help for the foreseeable future just so they can make ends meet every month.
- **Hunger and poverty often go hand in hand:** 53% of clients served have incomes that are at or below the federal poverty level (\$15,510 or less for household of two).



# Changing Faces of Hunger

- **Hunger impacts health:**
  - ▣ 26% of households report at least one member with diabetes
  - ▣ 47% include someone with high blood pressure
  
- **Rising costs in health care create hardship for hungry Alaskans:**
  - ▣ 34% have no health insurance of any kind
  - ▣ 56% of households report having unpaid medical bills.



# Changing Faces of Hunger



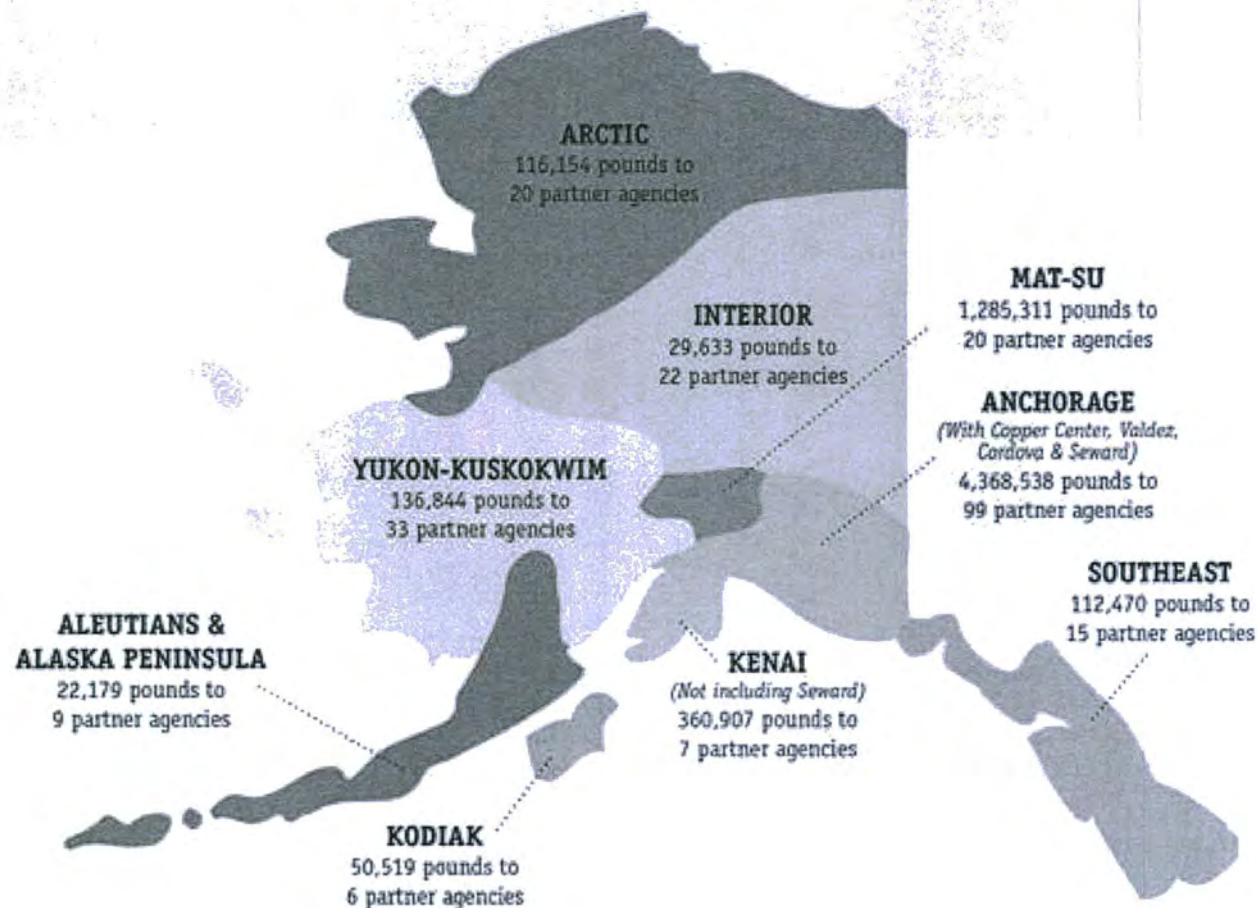
- **Hungry Alaskans are faced with difficult choices:** A majority of client households report having to choose between paying for food and paying for medical care (56%), housing (53%), transportation (64%), and utilities (59%).
- **Families in need adopt coping strategies,** such as eating food past expiration date (71%), purchasing processed, unhealthy, but cheap food (81%) or food in dented or damaged packages (57%), and receiving help from family or friends (54%).

# Food Bank of Alaska

FOOD BANK  
of ALASKA

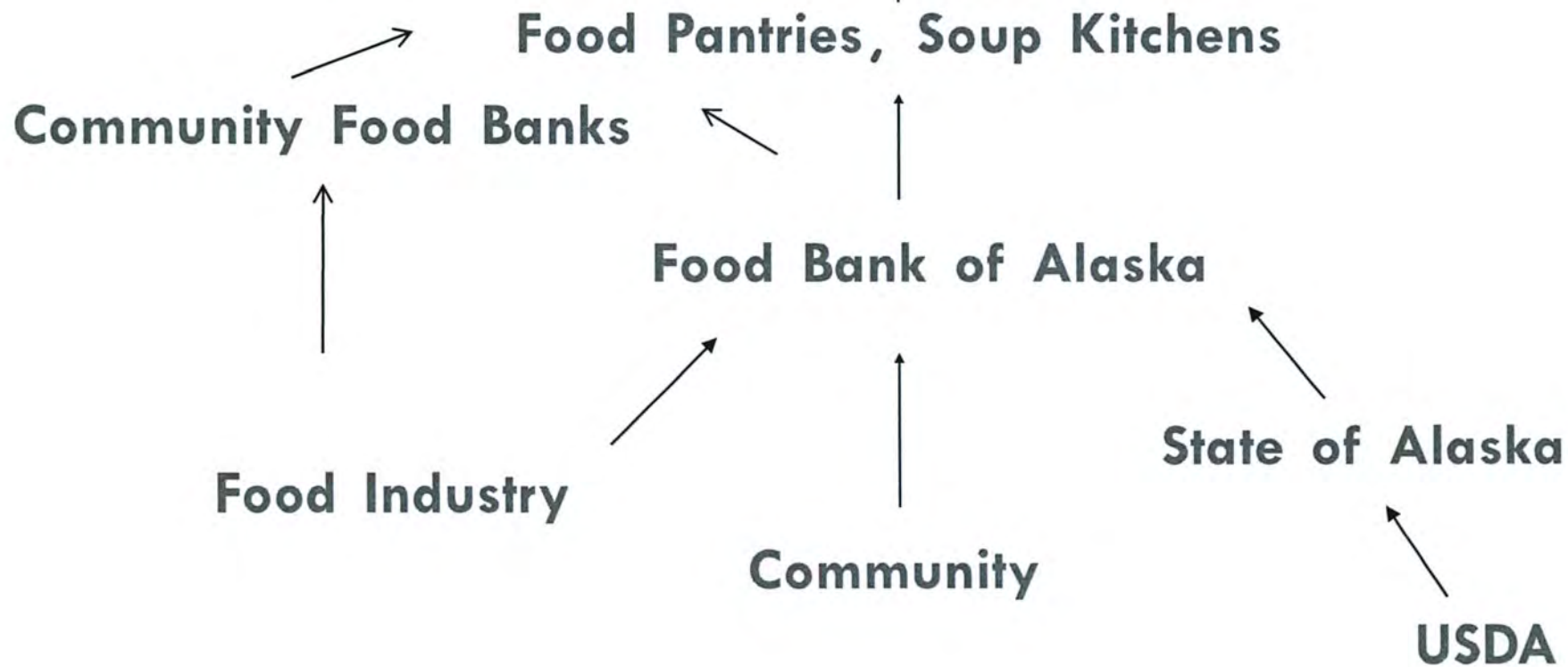


## 6.5 MILLION POUNDS OF FOOD DISTRIBUTED



FBA distributed **6.8 million pounds of food** – roughly **5.7 million meals** – in FY15 through the charitable food network around Alaska.

# Charitable Anti-Hunger System



# Agencies in our Network

- Meal Programs make up 19.5% of network and Grocery programs make up 80.5%
- 50% are faith based
- 64% of agencies report employing paid staff



# Food Assistance Programs



- ❑ Supplemental Nutrition Assistance Program (SNAP)
- ❑ Women, Infants and Children Program (WIC)
- ❑ Free or Reduced School Lunch or Breakfast Program (NSLP)
- ❑ Child and Adult Care Food Program (CACFP)
- ❑ Expanded Food and Nutrition Education

# Food Assistance Programs: How Families Get Help

- **School Meals** -- About 50% of all school children in Alaska qualify for free or reduced price meals (total enrolled is roughly 115,000)
- **Two USDA programs**
  - Child and Adult Care Food Program (CACFP)
  - Summer Food Service Program
- Child Nutrition Programs are important to low-income children's health and well-being



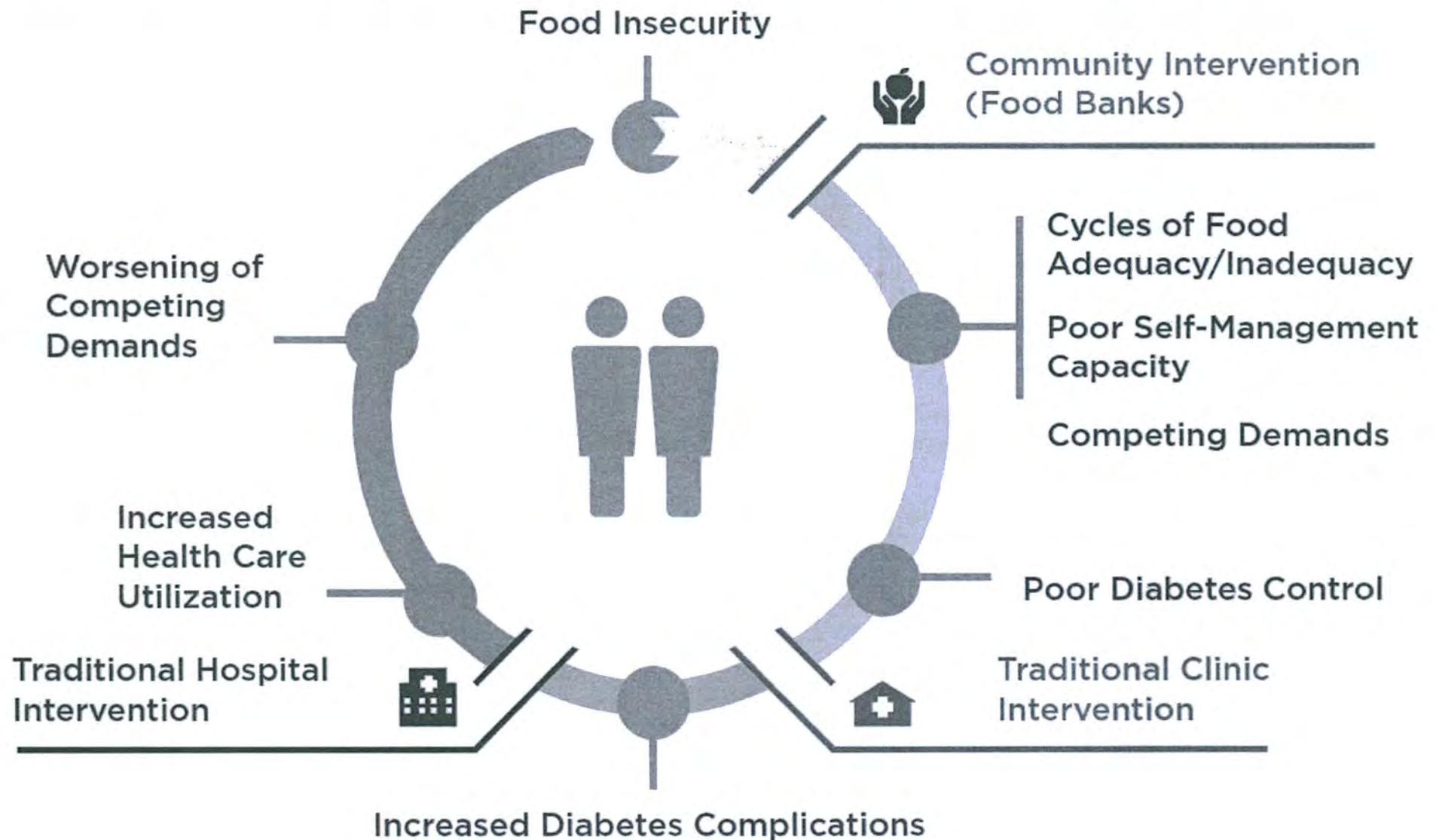
# Food Distribution on Indian Reservations (FDPIR)



- Provides a once a month allotment of USDA foods to eligible low-income households living in Alaska villages with fewer than 10,000 people.
- Administered by ANTHC
- Households cannot participate in FDPIR and SNAP (Food Stamps) at the same time
- There are currently 19 FDPIR distribution agencies in rural Alaska



# CYCLE OF FOOD INSECURITY & CHRONIC DISEASE: DIABETES



Adapted from Seligman HK, Schillinger D. N Engl J Med 2010;363:6-9.

# Food Insecurity and Obesity-Related Access Issues

---

## **Lack of access to healthy affordable foods**

Shift toward energy dense foods that provide maximum calories at least cost, in large part due to added sugar and fat.

## **Lack of access to physical activity resources**

Parks, green spaces, bike paths, and recreational facilities.

Crime, traffic, and unsafe neighborhoods.

## **Lack of access to reliable transportation**

# Food Insecurity and Chronic Disease

**Food  
insecurity**



**Limited dietary  
options**



- **Obesity**
- **Hypertension**
- **Diabetes**



- **Impaired self-management capacity**
- **Competing demands for time and money**



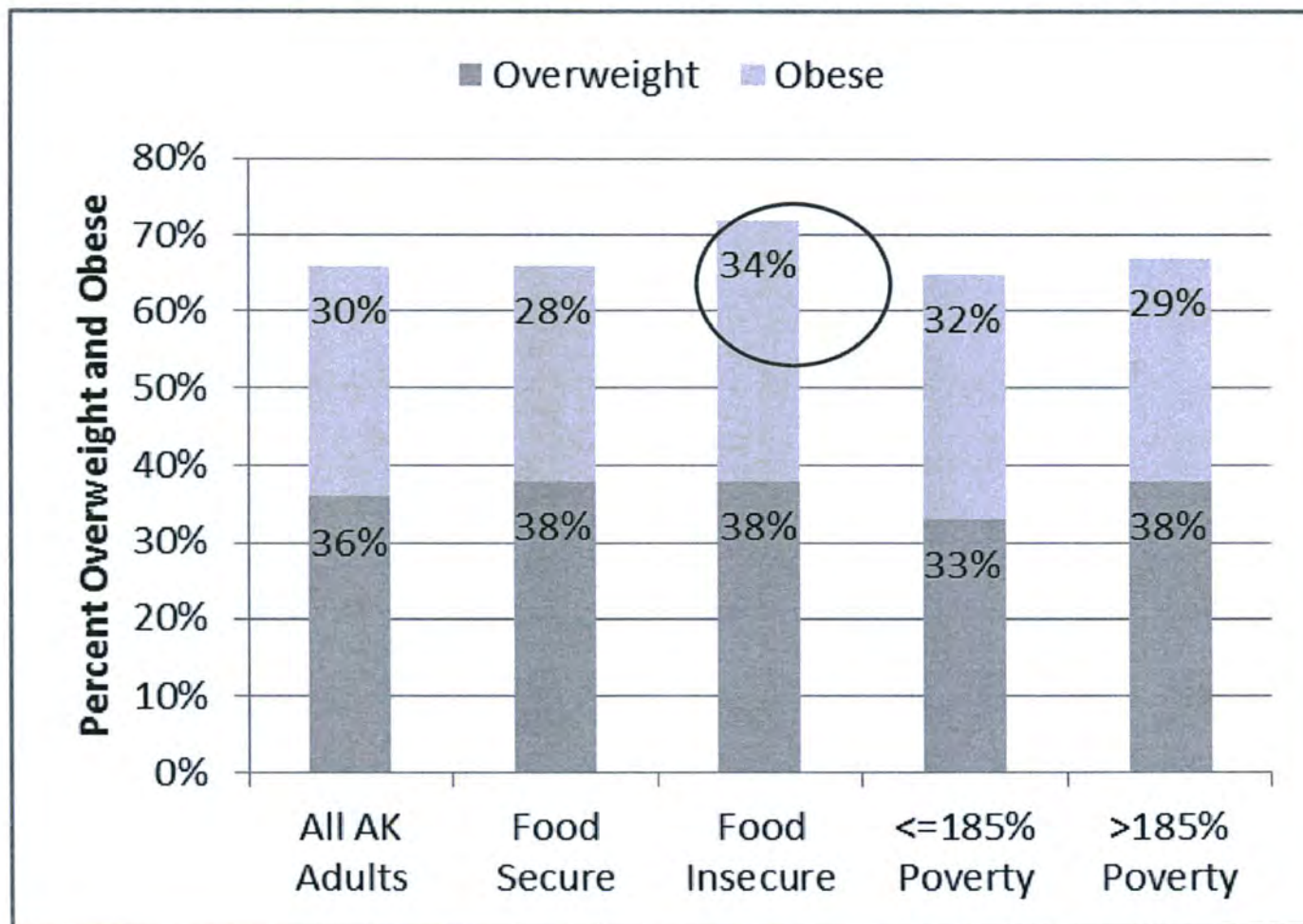
**Increased health  
care expenditures**



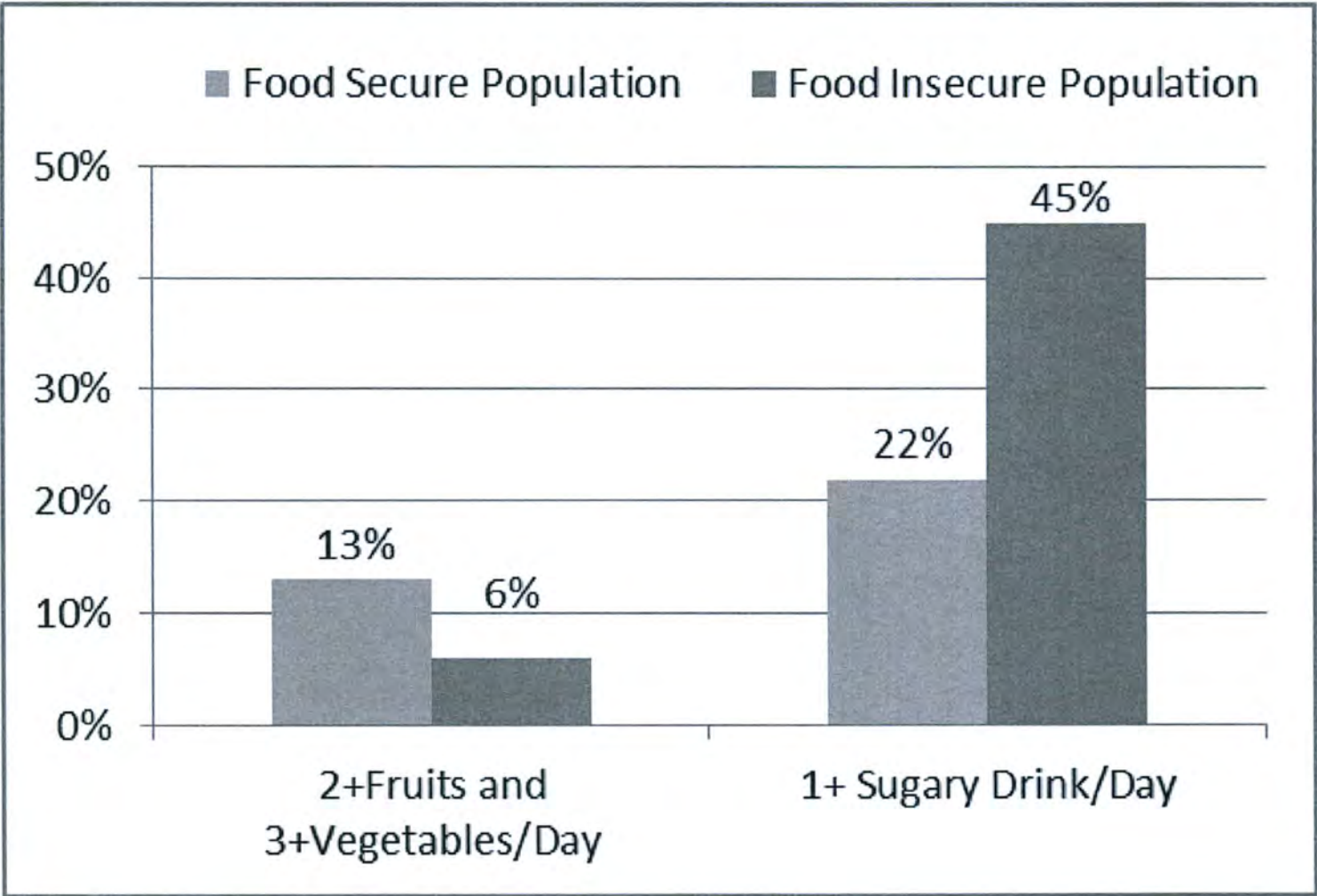
Seligman HK, Davis TC, Schillinger D, Wolf MS., **Food insecurity is associated with hypoglycemia and poor diabetes self-management in a low-income sample with diabetes.** J Health Care Poor Underserved. 2010 Nov;21(4):1227-33. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3004431/pdf/nihms-251752.pdf>

Seligman HK, Schillinger D. **Hunger and socioeconomic disparities in chronic disease.** N Engl J Med. 2010 Jul 1;363(1):6-9.

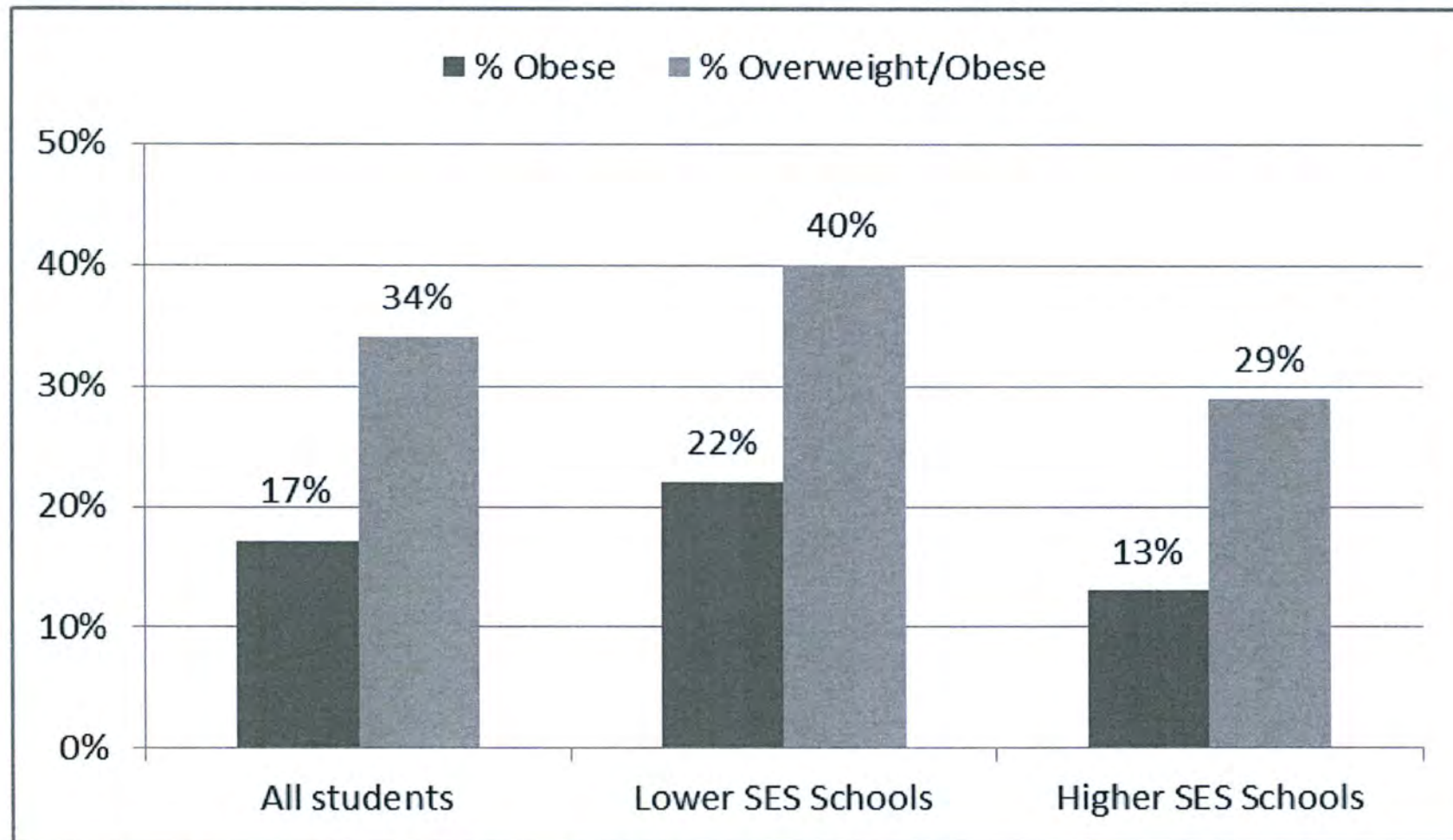
# Weight Status by Food Security and Income in Alaska Adults, 2013 (BRFSS)



# Consumption of Fruits, Vegetables and Sugary Drinks by Food Secure and Food Insecure Alaska Adults, 2013 (BRFSS)



# Prevalence of Overweight and Obesity in ASD & MSBSD Student,s Grades K, 1, 3, 4, & 7, by School Socioeconomic Status (SES)\*, 2013-14 School Year





SO WHAT?

QUESTIONS?

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907-222-2103

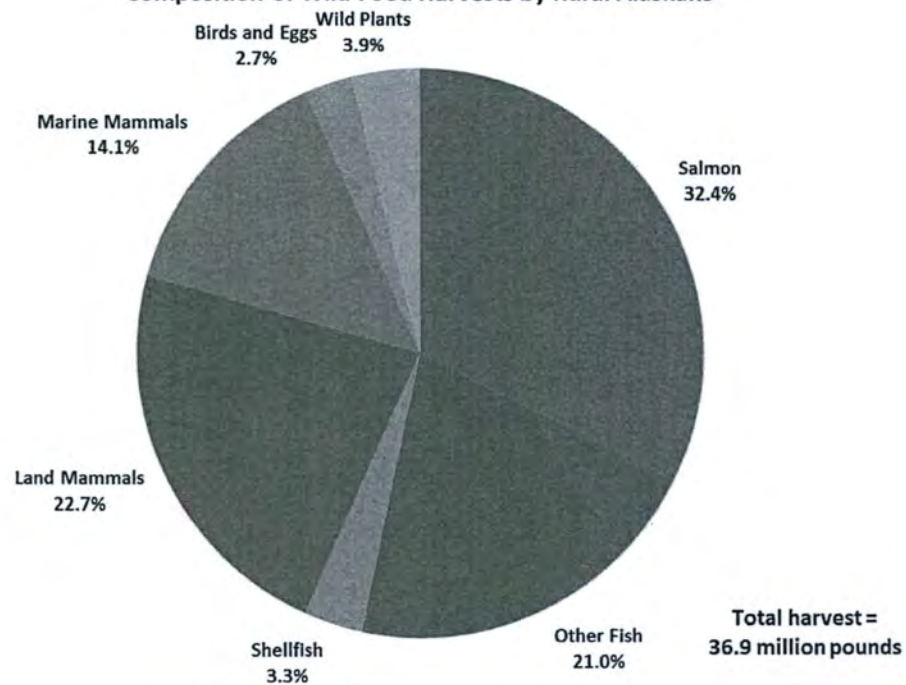
# Food Security and Wild Resource Harvests in Alaska



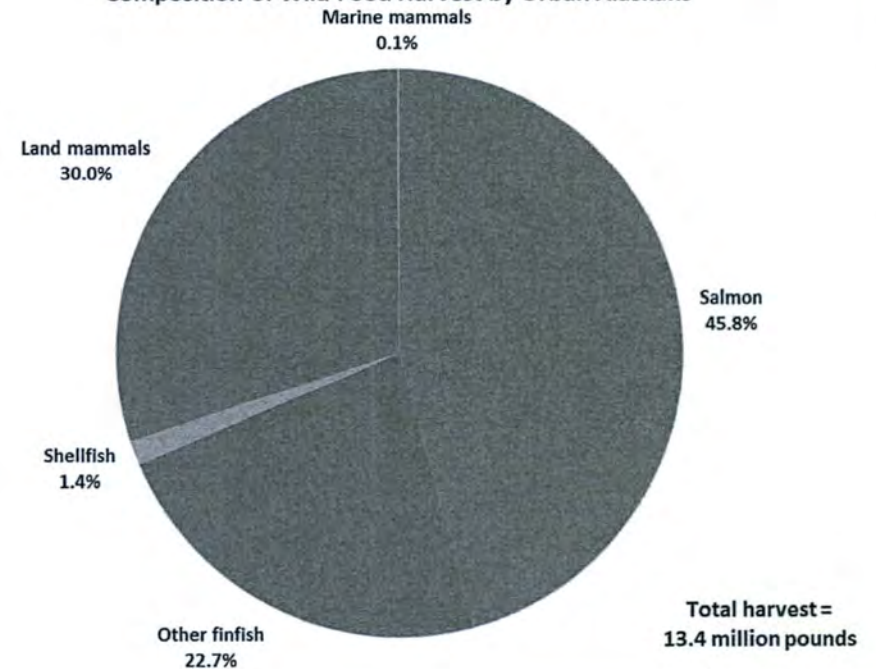
Lauren Sill  
Division of Subsistence  
Alaska Department of Fish and Game  
April 1, 2016

# Wild Food Harvests

Composition of Wild Food Harvests by Rural Alaskans

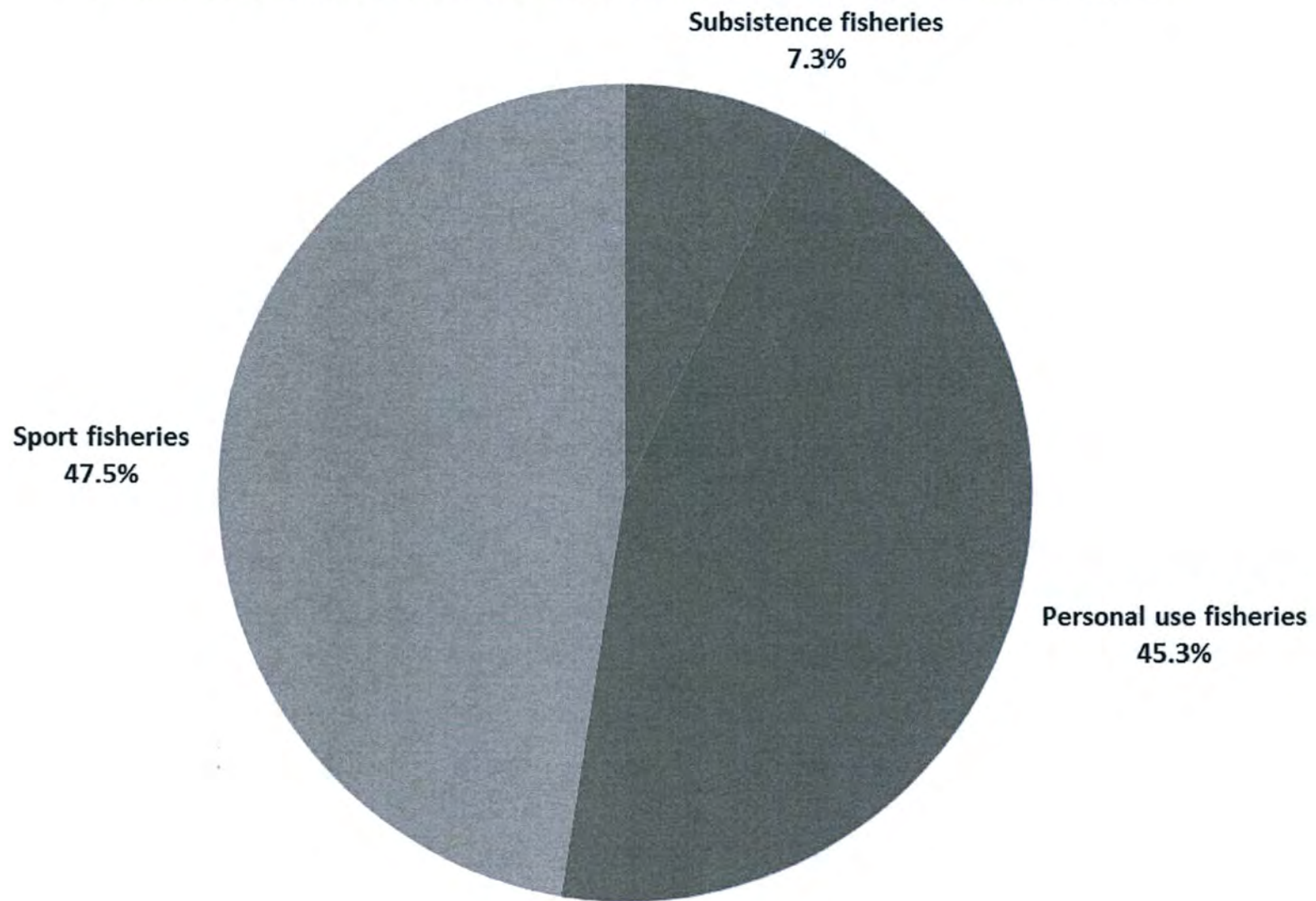


Composition of Wild Food Harvest by Urban Alaskans

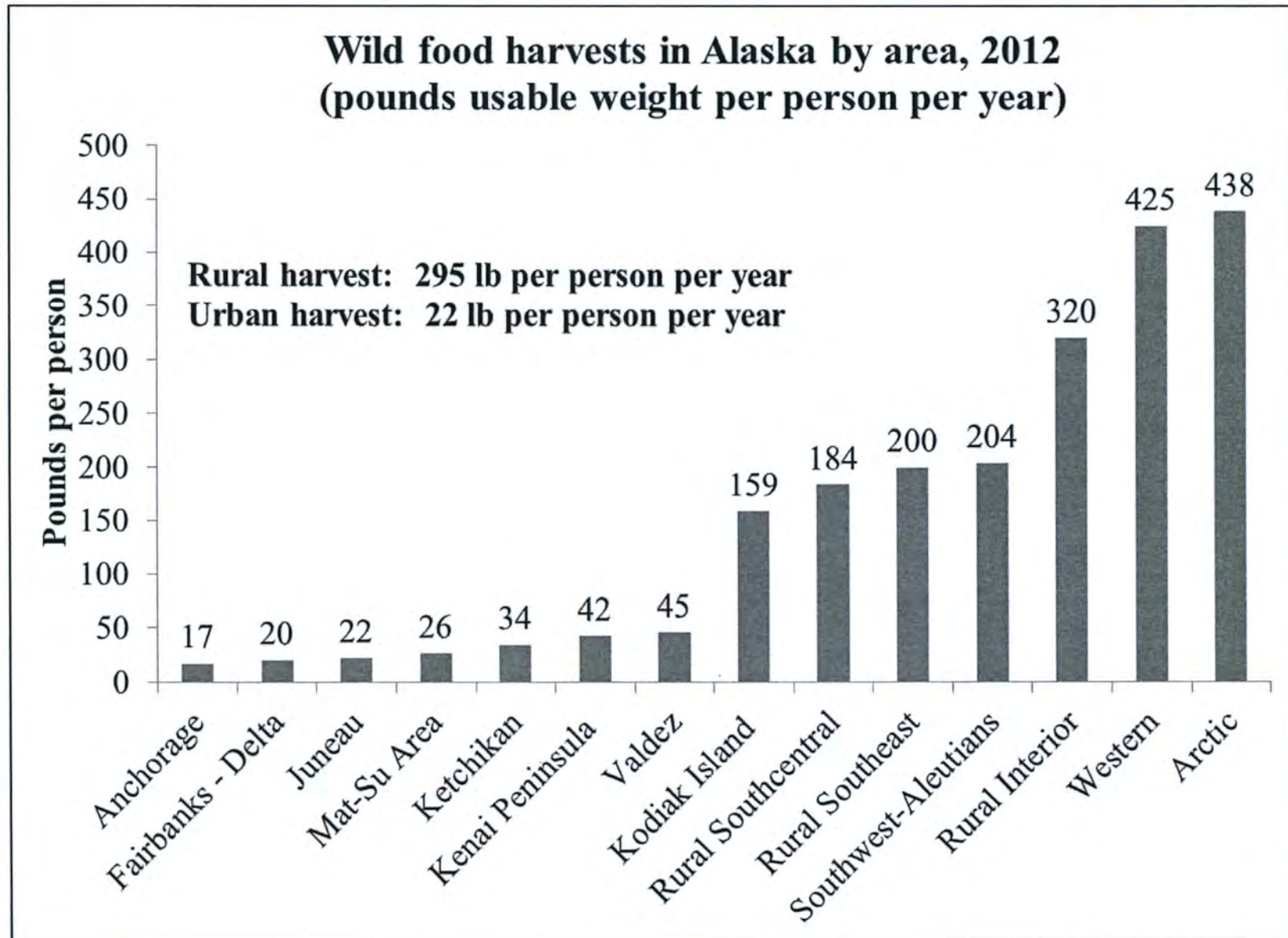


# Wild Food Harvests

Source of salmon harvested for home use by urban Alaska residents

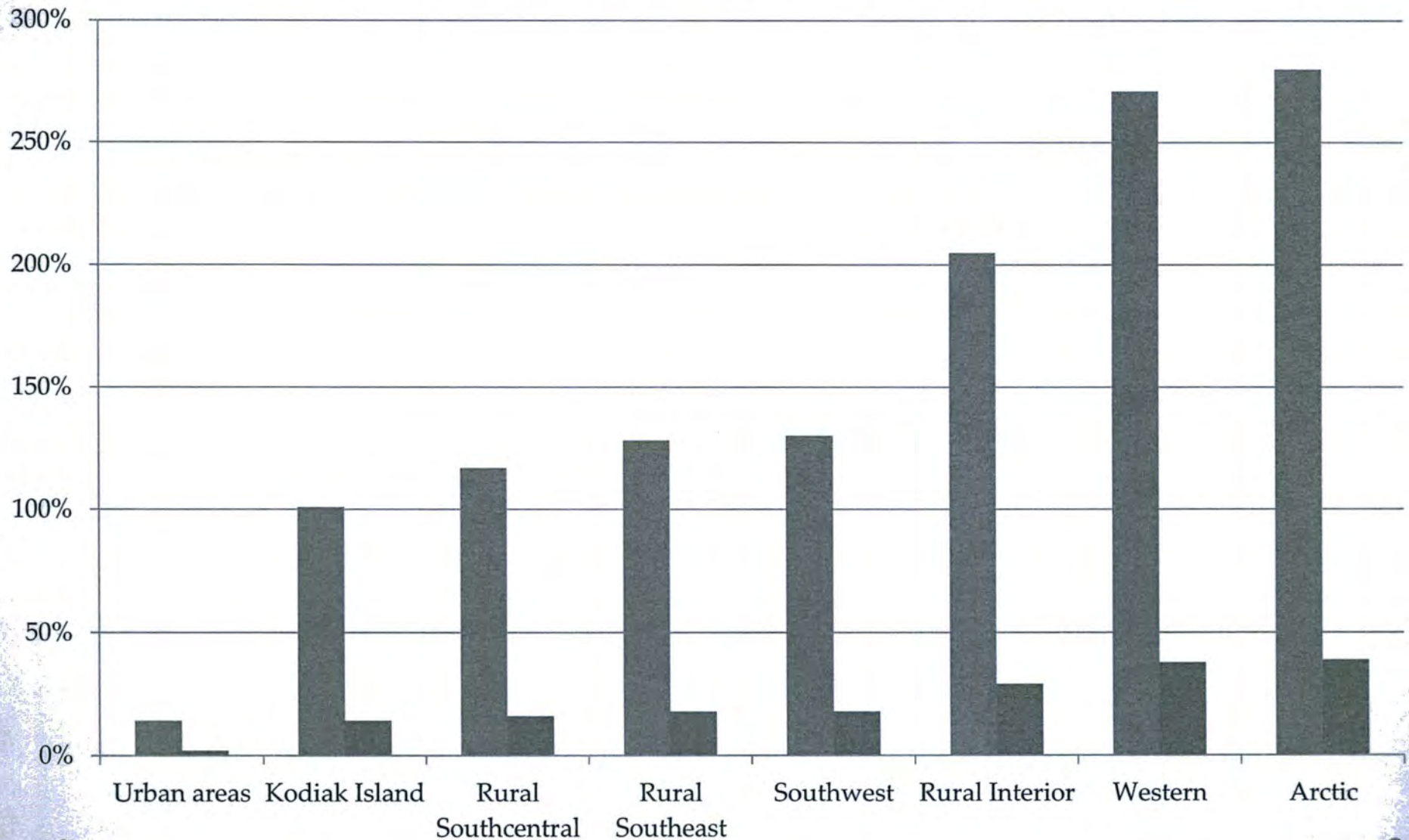


# Wild Food Harvests



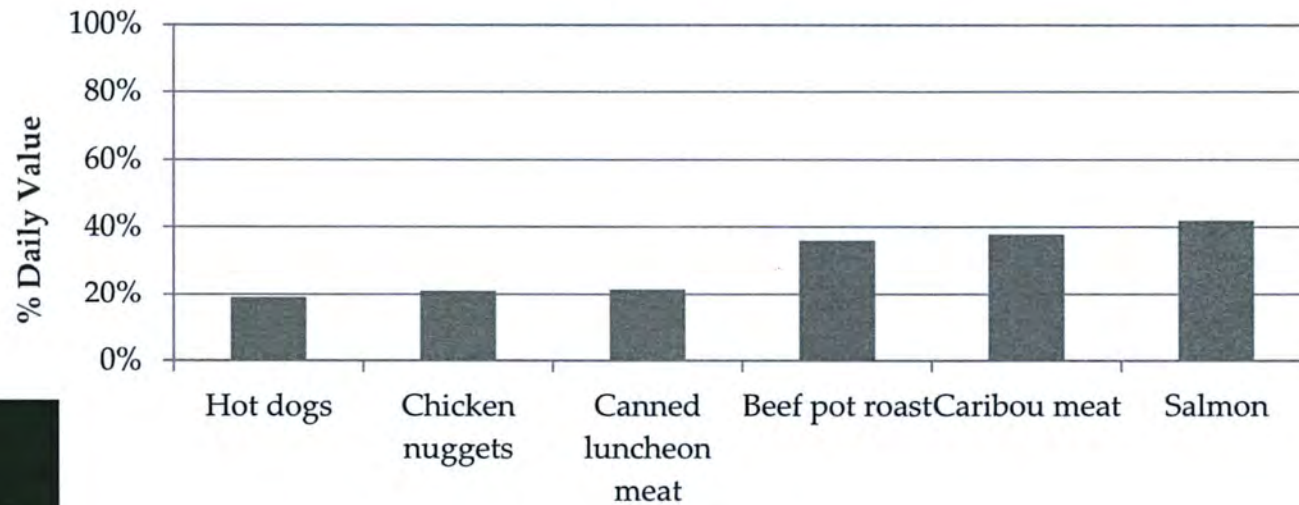
# Nutritional Value of Wild Foods

■ Percentage of daily protein requirements (46 g/day)   ■ Percentage of daily caloric requirements (2100 kcal/day)

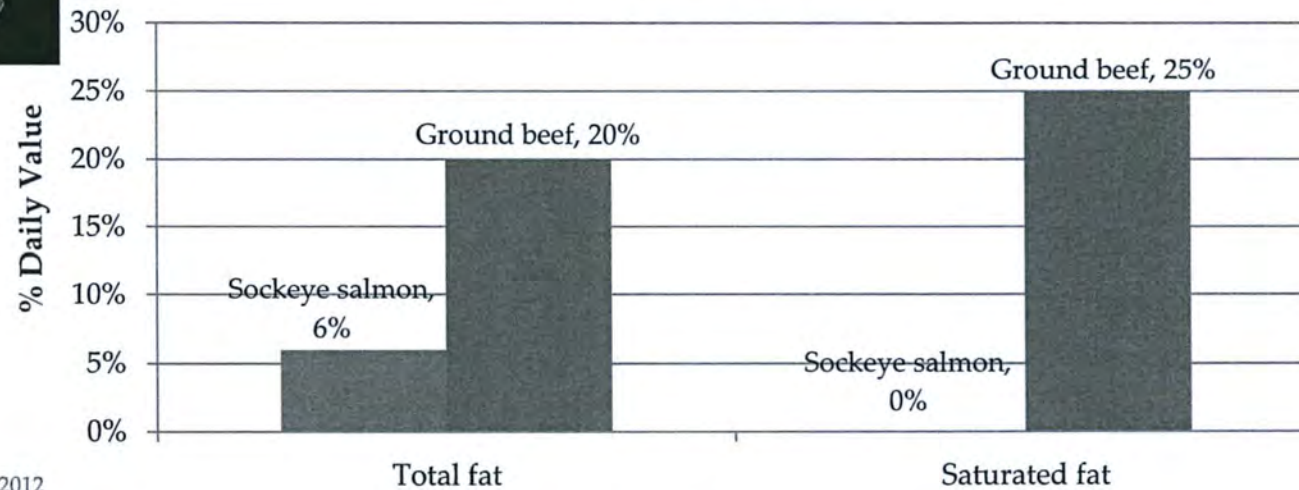


# Store Food and Wild Food

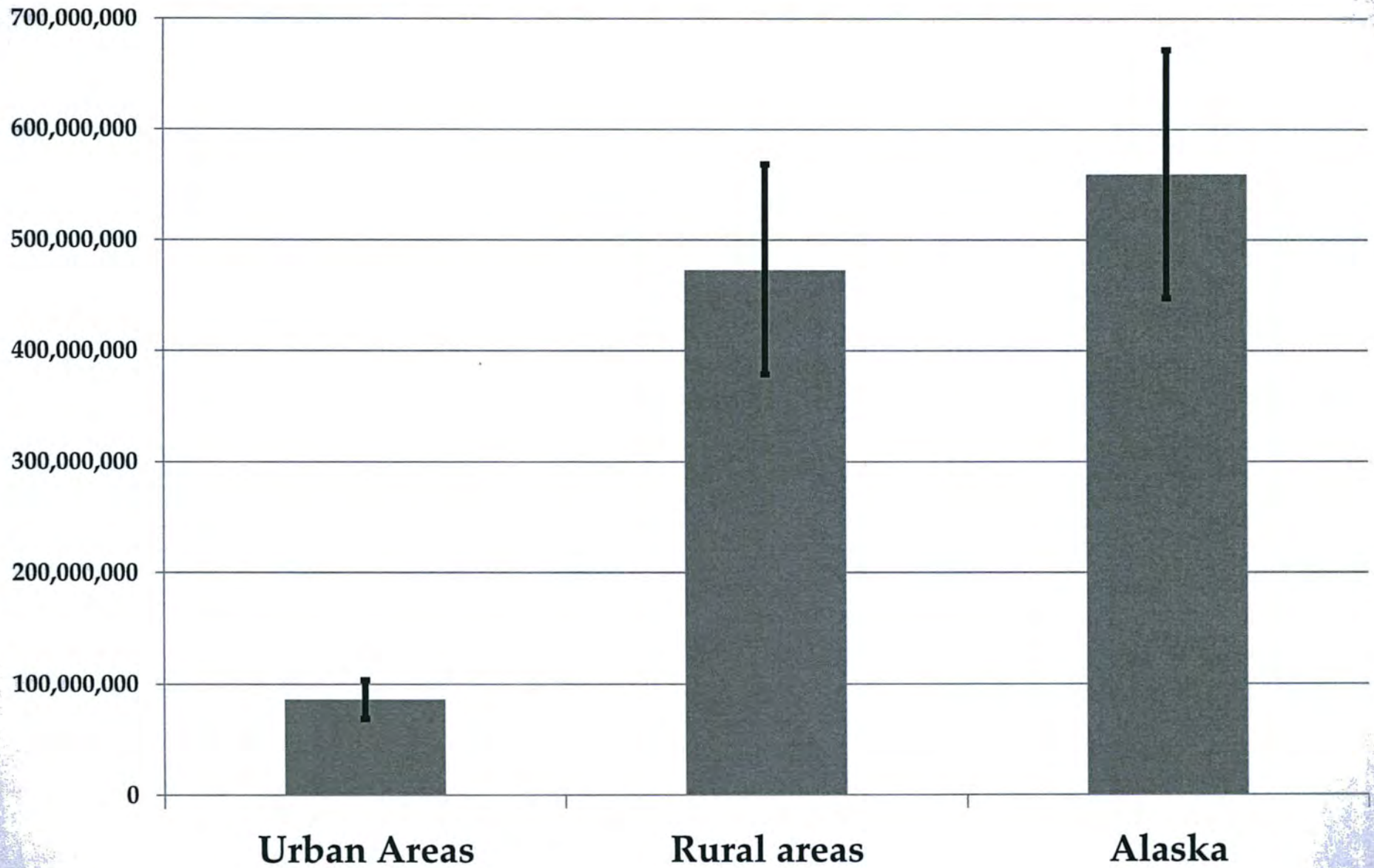
Nutrient: Protein



Nutrient: Fat



# Replacement Value



# Mixed Economy



- Small scale, efficient technologies
- Meeting needs of families and small communities
- Household wages invested in subsistence
- Sharing



# Sustainable and Resilient Communities



- Domestic mode
- Sharing
- Transmission of skills and values

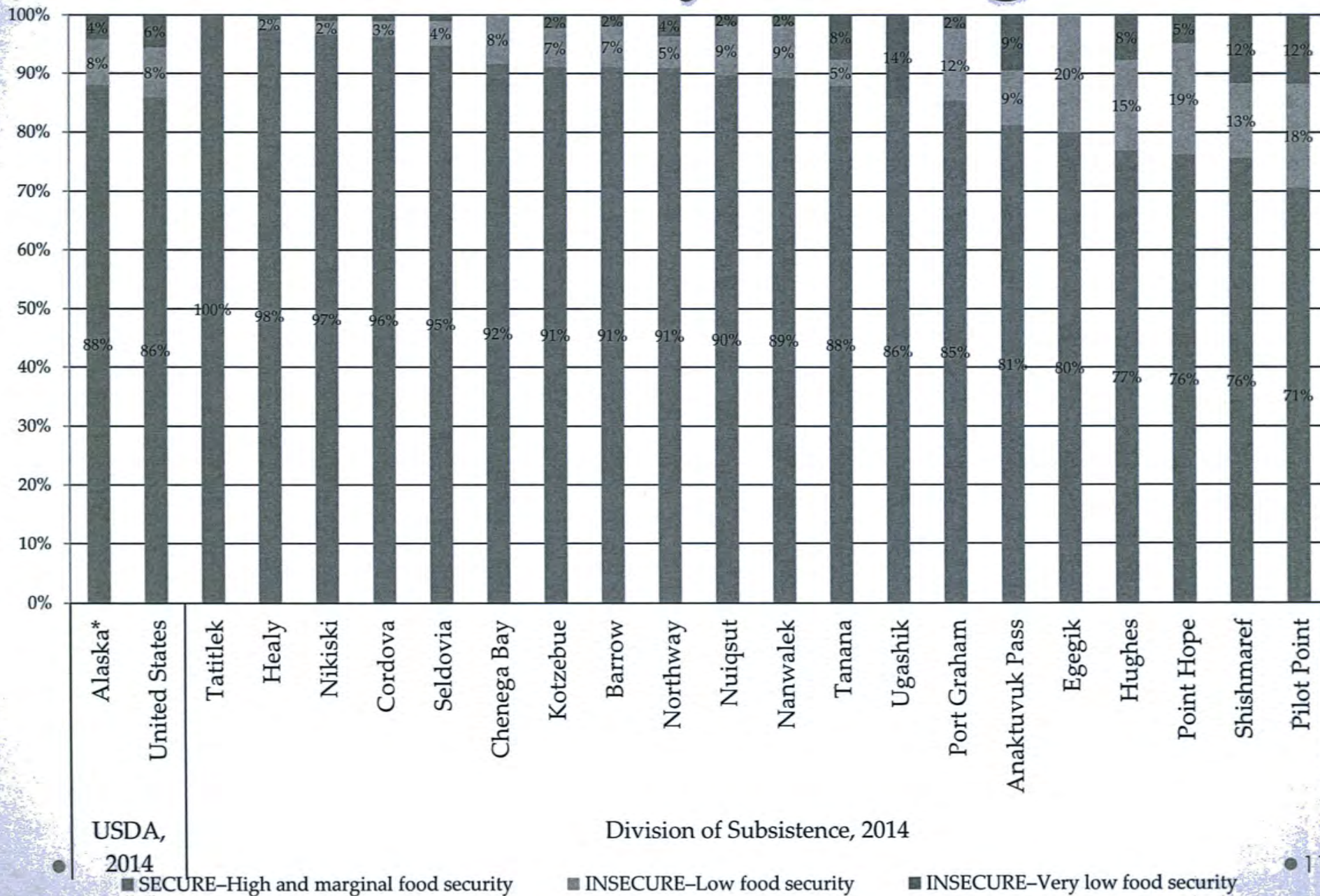


# Food Security Questions

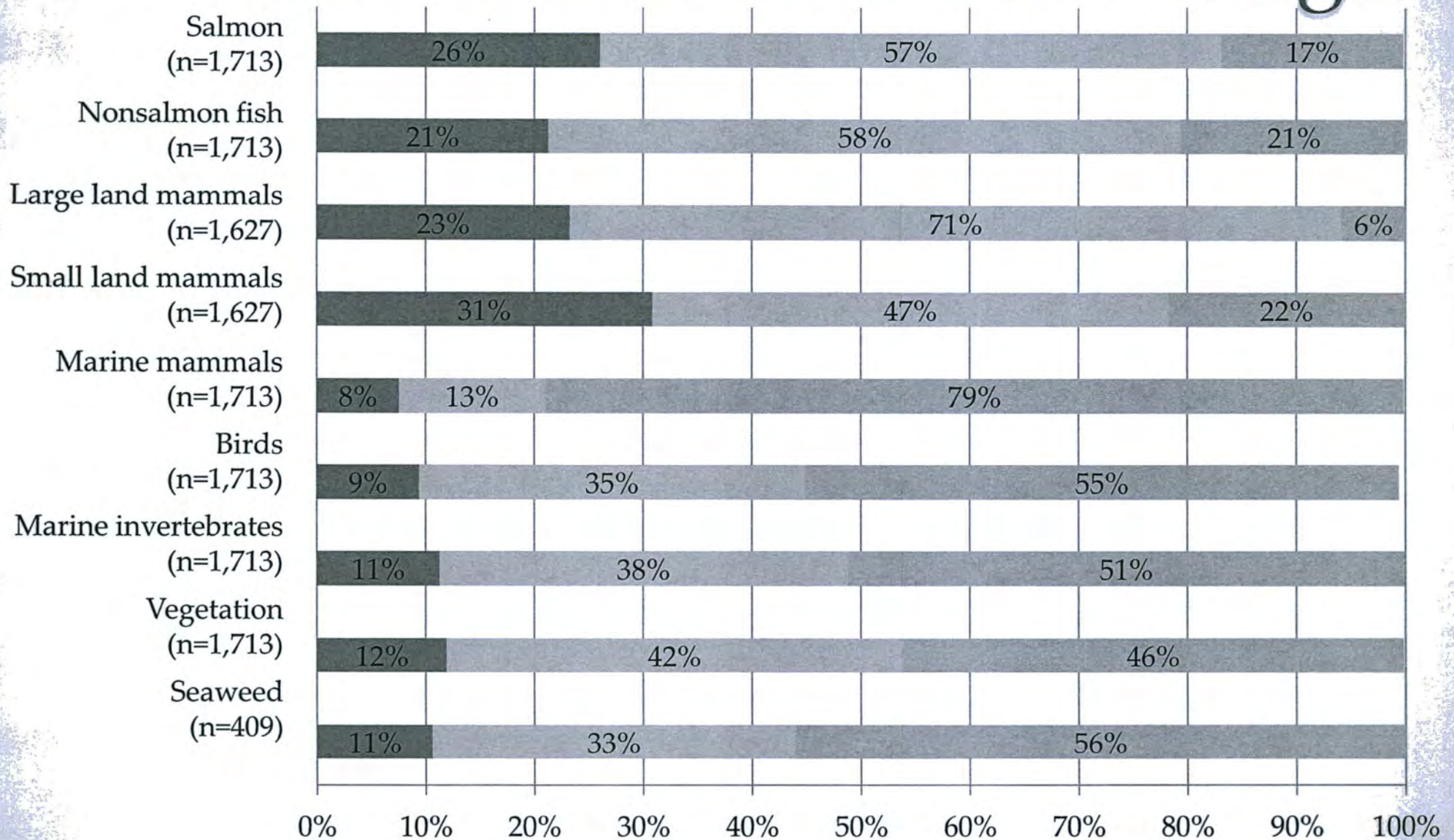
- Standard, national questionnaire
- Subsistence and market sources
- Seasonal variations



# Food Security Categories



# Did Your Household Get Enough



Percentage of valid responses

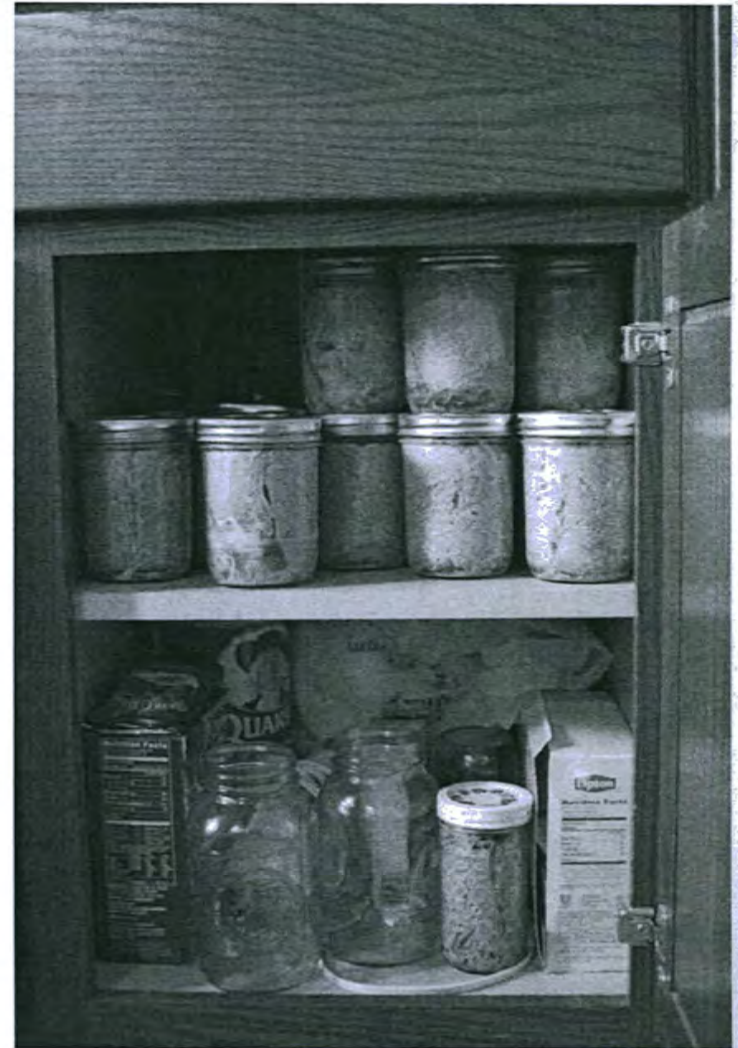
■ Household did not get enough

■ Household got enough of resource

■ Household normally does not use

# Reasons for Less Use

1. Resources less available
2. Lack of effort
3. Less sharing
4. Working/no time
5. Family/personal



# Conclusions

- Subsistence harvests important component of food security for Alaskans
- Diversity of harvests and sources of harvest
- Part of larger community economy
- Regional trends, no simple correlations



# For more information

- Community Subsistence Harvest Information System  
<http://www.adfg.alaska.gov/sb/CSIS/>
- Division technical paper series  
<http://www.adfg.alaska.gov/sf/publications/>
- 2012 Subsistence update