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Tools for Community Self-determination

Fairbanks Region (Alaska) Local Farm & Food Economy

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for
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*Covers Denali Borough, Fairbanks North Star Borough, & Southeast Fairbanks Census Area
in Alaska unless otherwise indicated.
Census of Agriculture data for the Interior Region also includes the Yukon-Koyukuk Census Area.*

Fairbanks Region (Bureau of Economic Analysis, 2011)

108,179 residents receive \$4.7 billion of income annually. Personal income increased 251% from 1969 to 2011, after dollars were adjusted for inflation, in part due to rising population.

The largest source of personal income in **Fairbanks North Star Borough** is government jobs, with \$1.9 billion. Transfer payments (from government programs such as pensions) rank second, at \$646 million. Construction and health care professions rank third, each bringing in \$300 million of personal income. Retail workers earn \$200 million. Note that income from public sources makes up 60% of all personal income in the region.

Income earned from transfer payments includes \$119 million of retirement and disability insurance benefits; \$258 million of medical benefits; \$68 million of income maintenance benefits; \$31 million of unemployment insurance; and \$43 million of veterans' benefits.

Government income includes \$349 million of income earned by federal workers and \$542 million earned by state and local government workers. Military personnel earn \$1 billion of personal income.

Although population has increased more than 142% since 1969, there has been only limited public planning to assure a secure and stable food supply.

Issues affecting low-income residents of the Fairbanks North Star Borough:

Over 20,000 residents (20%) earn less than 185% of federal poverty guidelines. At this level of income, children qualify for free or reduced-price lunch at school. These lower-income residents spend \$43 million each year buying food, including \$16 million of SNAP benefits (formerly known as food stamps) in 2011, and additional WIC coupons. SNAP benefits averaged \$6.9 million from

¹ Considerable research assistance provided by Nick Wojciak.

1989 to 2011. The Borough's 212 farmers receive an annual combined total of \$2.9 million in subsidies (23-year average, 1989-2011), mostly to raise crops such as oats or barley that are sold as commodities, not to feed local residents; or for conservation practices. *Data from Federal Census of 2007-2011, Bureau of Labor Statistics, & Bureau of Economic Analysis.*

4% percent of the region's households (over 4,000 residents) earn less than \$10,000 per year. *Source: Federal Census of 2007-2011.*

13% of adults aged 18-64 in the North Star Borough carried no health insurance in 2008. *Source: Centers for Disease Control.*

Food-related health conditions:

21% of North Star Borough residents reported in 2005 that they eat five or more servings of fruit or vegetables each day. 79% do not. This level of adequate consumption is lower than the 2003 rate of 25%. This is a key indicator of health, since proper fruit and vegetable consumption has been connected to better health outcomes. *Source: Centers for Disease Control.*

60% of North Star Borough adults reported in 2005 that they have at least 30 minutes of moderate physical activity five or more days per week, or vigorous physical activity for 20 or more minutes three or more days per week. This is similar to the rate reported in 2003. *Source: Centers for Disease Control.*

4% of North Star Borough residents have been diagnosed with diabetes. *Source: Centers for Disease Control.* Medical costs for treating diabetes and related conditions in the North Star Borough are estimated at \$57 million per year. Costs for the state of Alaska as a whole total \$417 million. *Source: American Diabetes Association cost calculator.*

64% of North Star Borough residents were overweight (28%) or obese (36%) in 2008, up from 62% in 2003. *Source: Centers for Disease Control.*

The Interior Region's farms (Agricultural Census, 2007)

Agriculture Census data for 2007 were released February 4, 2009

Note: Census of Agriculture data for the Interior Region covers the Denali Borough, Fairbanks North Star Borough, Southeast Fairbanks Census Area, & the Yukon-Koyukuk Census Area.

The Census of Agriculture defines a "farm" as "an operation that produces, or would normally produce and sell, \$1,000 or more of agricultural products per year."

Land:

- 212 farms. This is 31% of Alaska's farms.
- The Fairbanks/Interior Alaska region had 13% more farms in 2007 than in 2002. Some of this may be due to census takers making better contact with small farms.
- 26 (12%) of these are 1,000 acres or more in size.
- 72 (34%) farms are less than 50 acres.
- Average farm size is 523 acres, significantly less than the state average of 1,285 acres.
- The region has 111,000 acres of land in farms.
- This amounts to 13% of the state's farmland.
- The Fairbanks/Interior Alaska region holds 17,000 acres of harvested cropland.
- 1,956 of these acres are irrigated.
- Average value of land and buildings per farm was \$406,000. This was less than the 2007 state average of \$502,000.

Sales:

With the exception of foods sold directly to consumers (see below), farmers typically sell commodities to wholesalers, brokers or manufacturers that require further processing or handling to become consumer items. The word "commodities" is used in this report to mean the crops and livestock sold by farmers through these wholesale channels. The term "products" encompasses commodity sales, direct sales, and any other sales.

- The region's farmers sold \$7.1 million of crops and livestock in 2007.
- Farm product sales increased by 34% from 2002 to 2007.
- \$5.9 million of crops were sold.
- \$1.2 million of livestock and products were sold.
- 122 (58%) of the region's farms sold less than \$10,000 of products in 2007.
- Total sales from these small farms were \$271,000, 4% of the region's farm product sales.
- 16 (8%) of the region's farms sold more than \$100,000 of products.
- Total sales from these larger farms were \$1.4 million, 20% of the region's farm product sales.
- 51% of the region's farms (108 of 212) reported net losses in 2007. This is less than the Alaska average of 57%.
- 50 (24%) of the Fairbanks/Interior Alaska region's farmers collected a combined total of \$1.4 million of federal subsidies in 2007.

Top farm products of the Fairbanks/Interior Alaska region (2007). *Note that data for sales of barley, vegetables, fruits, tree nuts, and berries, poultry and eggs, and milk, were suppressed by the USDA in an effort to protect confidentiality, so this chart does not necessarily reflect top selling products.*

Product	\$ millions
Ornamentals	2.5
Forage crops (hay, etc.)	2.5
Cattle and calves	0.3

Production Expenses:

- Hired farm labor was the largest single expense to the Fairbanks/Interior Alaska region farmers, with \$1.4 million (19% of production expenses).
- The Fairbanks/Interior Alaska region farmers charged \$1.1 million (14%) to depreciation.
- Fertilizer, lime, and soil conditioners cost farmers \$1.1 million (14%).
- Supplies, repairs, and maintenance purchases totaled \$1.1 million (14%).
- Purchases of gasoline, fuels, and oils totaled \$1 million (13%).
- Feed purchases were \$526,000 (7%).
- Purchases of seeds, plants, vines, and trees cost farmers \$458,000 (6%).

Cattle & Dairy:

- 42 farms hold an inventory of 1,421 cattle.
- 279 cattle were sold by farmers in 2007 for total sales of \$260,000.
- 32 farms raise beef cows.
- 14 farms raise milk cows.
- 87 farms produced 17,000 tons of forage crops (hay, etc.) on 11,000 acres.
- 77 farms sold \$2.4 million of forage.

Other Livestock & Animal Products:

- 13 farms hold an inventory of 216 hogs and pigs.
- 15 farms sold 579 hogs and pigs in 2007.
- 18 farms hold sheep and lambs. *Note that data for inventory of sheep and lambs were suppressed by the USDA in an effort to protect confidentiality.*
- 9 farms sold \$10,000 worth of sheep, goats, and lambs in 2007.
- 24 farms hold an inventory of 785 laying hens.
- 1 farm raises broiler chickens.
- 14 farms raise horses and ponies.

Grains, Oil Seeds, & Edible Beans:

- 5 farms produced of oats. *Note that data for acreage and bushels of oats were suppressed by the USDA in an effort to protect confidentiality.*
- 17 farms produced 165,000 bushels of barley on 4,232 acres. *Note that data for sales of barley were suppressed by the USDA in an effort to protect confidentiality.*

Vegetables & Melons (some farmers state that Ag Census data does not fully represent vegetable production):

- 35 farms worked 340 acres to produce vegetables. Note that data for sales of vegetables were suppressed by the USDA in an effort to protect confidentiality.
- This represents a 3 farm increase since 2002 levels.
- 23 farms raised potatoes.

Fruits (some farmers state that Ag Census data does not fully represent fruit production):

- 1 farm in the region runs an orchard.
- 12 farms sold fruits, nuts, and berries. *Note that data for sales of fruits, tree nuts, and berries were suppressed by the USDA in an effort to protect confidentiality.*

Nursery & Greenhouse Plants:

- 34 farms sold \$2.4 million worth of ornamentals in 2007.
- This represents a 9 farm increase since 2002, and 34% increase in the number of sales.
- No farms sold Christmas trees.

Direct & Organic Sales:

- 38 farms sell \$564,000 of food products directly to consumers. This is a 6-farm increase in the number of farms selling direct, and a 208% increase in direct sales, over 2002 sales of \$183,000.
- This amounts to 8% of farm product sales, 20 times the national average of 0.4%.
- 12 farms in the region sold organic products. *Note that data for sales of organic products were suppressed by the USDA in an effort to protect confidentiality.*
- For comparison, 34 farms in Alaska sold \$687,000 of organic food products.
- 11 farms market through community supported agriculture (CSA).
- 17 farms produce and sell value-added products.

Conservation Practices:

- 40 farms use conservation methods such as no-till, limited tilling, filtering field runoff to remove chemicals, fencing animals to prevent them from entering streams, etc.
- 26 farms practice rotational or management intensive grazing.
- 11 farms generate energy or electricity on the farm.

**Limited-resource farms and others in the Fairbanks/Interior Alaska region.
(Census of Agriculture, 2007)**

*Note (D) denotes that data were suppressed, and * denotes that a total is incomplete.*

Small family farms:	Farms	Percent	Acres	Percent
Limited-resource	27	13%	3,303	3%
Retirement	49	23%	19,380	17%
Residential/lifestyle	65	31%	19,245	17%
Farming occupation/lower sales	46	22%	28,989	26%
Farming occupation/higher sales	6	3%	(D)	-
Large family farms	4	2%	(D)	-
Very large family farms	1	0%	(D)	-
Nonfamily farms	14	7%	6,467	6%
	Total	212	*77,384	

Definitions of terms (Agricultural Census 2007):

Limited-resource farms have market value of agricultural products sold gross sales of less than \$100,000, and total principal operator household income of less than \$20,000.

Retirement farms have market value of agricultural products sold of less than \$250,000, and a principal operator who reports being retired.

Residential/lifestyle farms have market value of agricultural products sold of less than \$250,000, and a principal operator who reports his/her primary occupation as other than farming.

Farming occupation/lower-sales farms have market value of agricultural products sold of less than \$100,000, and a principal operator who reports farming as his/her primary occupation.

Farming occupation/higher-sales farms have market value of agricultural products sold of between \$100,000 and \$249,999, and a principal operator who reports farming as his/her primary occupation.

Large family farms have market value of agricultural products sold between \$250,000 and \$499,999.

Very large family farms have market value of agricultural products sold of \$500,000 or more.

Nonfamily farms are farms organized as nonfamily corporations, as well as farms operated by hired manager.

County and State Highlights

Fairbanks Area highlights (Agriculture Census 2007):

- 212 farms, 13% more than in 2002.
- The area has 111,000 acres of land in farms.
- Farmers sold \$7.1 million of products in 2007.
- \$5.9 million (83%) of these sales were crops.
- \$1.2 million (17%) of these sales were livestock.
- The most prevalent farm size is 50 to 179 acres, with 48 farms (23%) in this category.
- The next most prevalent is 180 to 499 acres, with 45 (21%) farms.
- 26 farms (12%) are 1,000 acres or more.
- 72 farms (34%) are less than 50 acres.
- 122 farms (58%) sold less than \$10,000 in farm products.
- 16 farms (8%) sold more than \$100,000 in farm products.
- Total sales from these larger farms were \$1.4 million, 20% of the region's farm product sales.
- 51% of the region's farms (108 of 212) reported net losses in 2007. This is less than the Alaska average of 57%.
- The Fairbanks Area ranks first in Alaska for sales of grains, oilseeds, dry beans, and dry peas, with \$581,000.
- The area ranks 1st in the state for sales of forage crops (hay, etc.), with \$2.4 million.
- The Fairbanks Area ranks 1st in the state for acreage of forage crops (hay, etc.), with 11,000.
- The area ranks 1st in the state for acreage of barley, with 4,232.
- The Fairbanks Area ranks first in the state for acreage of oats, but *acreage figures were not released by the USDA in an effort to protect confidentiality.*
- The area ranks first in Alaska for inventory of bee colonies, but *inventory figures were not released by the USDA in an effort to protect confidentiality.*
- The Fairbanks Area ranks 2nd in the state for sales of crops, with \$5.9 million.
- The area ranks 2nd in the state for sales of fruits, tree nuts, and berries, with, but *sales figures were not released by the USDA in an effort to protect confidentiality.*
- The Fairbanks Area ranks 2nd in the state for sales of ornamentals, with \$2.4 million.
- The area ranks second in the state for sales of poultry and eggs, but *sales figures were not released by the USDA in an effort to protect confidentiality.*
- The Fairbanks Area ranks 2nd in the state for sales of cattle and calves, with \$260,000.
- The area ranks second in Alaska for sales of milk, but *sales figures were not released by the USDA in an effort to protect confidentiality.*
- The Fairbanks Area ranks second in the state for sales of hogs and pigs, with \$82,000.
- The area ranks second in the state for sales of sheep, goats, and their products, with \$10,000.
- The Fairbanks area ranks 2nd in Alaska for sales of horses, with \$86,000.
- The area ranks second in the state for acreage of vegetables, with 340.
- The Fairbanks Area ranks 2nd in the state for acreage of potatoes, with 306.
- The area ranks 2nd in the state for inventory of cattle and calves, with 1,421.
- The Fairbanks Area ranks second in Alaska for inventory of bison, but *inventory figures were not released by the USDA in an effort to protect confidentiality.*
- Direct sales were 8% of farm product sales, 20 times the national average of 0.4%.

State of Alaska highlights (Agriculture Census 2007):

- 686 farms, 13% more than in 2002.
- Alaska has 882,000 acres of land in farms.
- Farmers sold \$57 million of products in 2007.
- \$25.7 million (43%) of these sales were crops.
- \$32.3 million (57%) of these sales was livestock.
- The most prevalent farm size is 1 to 9 acres, with 165 farms (24%) in this category.
- The next most prevalent is 10 to 49 acres, with 164 (24%) farms.
- 52 farms (8%) are 1,000 acres or more.
- 239 farms (48%) are less than 50 acres.
- 403 farms (59%) sold less than \$10,000 in farm products.
- 77 farms (11%) sold more than \$100,000 in farm products.
- 149 farms sold \$1.7 million of food directly to consumers. This is a 35% increase in the number of farms selling direct (110 in 2002), and a 103% increase in direct sales over 2002 sales of \$829,000.
- Direct sales were 3% of farm product sales, 12.5 times the national average of 0.4%.
- Statewide vegetable sales totaled \$4.3 million.
- If direct food sales made up a single commodity, the value of these sales would outrank the state's fifth most important product, dairy.
- 35 farms farm organically. *Note that data for acreage of harvested and pastured land were suppressed by the USDA in an effort to protect confidentiality.*
- 222 acres on 18 farms are undergoing organic conversion.
- 34 farms in Alaska sold \$687,000 of organic food products, including \$671,000 of crops (this may include ornamental and greenhouse crops). *Note that data for sales of livestock and poultry and products from livestock and poultry were suppressed by the USDA in an effort to protect confidentiality.*
- 20 farms market through community supported agriculture (CSA).
- 48 farms produce value-added products.
- 131 farms use conservation methods such as no-till, limited tilling, filtering field runoff to remove chemicals, fencing animals to prevent them from entering streams, etc.
- 95 farms practice rotational or management intensive grazing.
- 35 farms generate energy or electricity on the farms.

Alaska's top farm products in 2011 (Economic Research Service)

The data in this table, and the pie chart on the next page, cover Alaska as a whole.

	\$ millions
Ornamentals	13.0
Forage	3.6
Potatoes	3.5
Cattle & calves	2.2
Dairy	1.5
Barley	0.7
Hogs	0.3
Oats	0.2

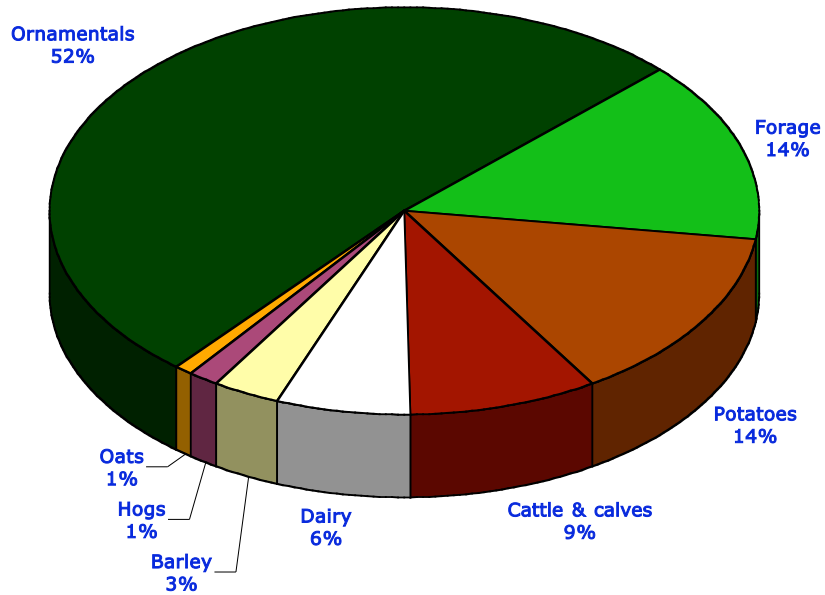
Note: honey and wool were also listed among Alaska's top ten products, but sales figures for these products were not released by ERS, in an effort to protect confidentiality.

Note also that at \$1.7 million, direct sales from farmers to consumers amount to more than the value of the 5th-ranking product, dairy.

Alaska's top farm products in 2010 (Economic Research Service)

See table on previous page

Top Farm Products in Alaska, 2011



Source: USDA Economic Research Service

Balance of Cash Receipts and Production Costs (BEA):

Fairbanks North Star Borough farmers sell \$9 million of food products per year (1989-2011 average), spending \$10 million to raise them, for an average loss of \$1 million each year. This is an average net loss of nearly \$5,000 per farm. *Note that these sales figures compiled by the BEA may differ from cash receipts recorded by the USDA Agriculture Census for 2007 (above).*

Overall, farm producers spent \$24 million more to produce crops and livestock over the years 1989 to 2011 than they earned from selling these products. Net cash farm income was positive for only eight years of that 23-year period. Moreover, 51% of the region's farms reported that they lost money in 2007 (Ag Census). North Star Borough farmers and ranchers earned \$1.2 million less by selling commodities in 2011 than they earned in 1969 (in 2011 dollars).

Farmers earn another \$855,000 per year of farm-related income — primarily custom work, and rental income (23-year average for 1989-2011). Federal farm support payments are often a more important source of net income than commodity production, averaging \$2.9 million per year for the region for the same years.

The region's consumers:

See also information covering low-income food consumption and food-related health conditions, page 1-2 above.

North Star Borough consumers spend \$274 million buying food each year, including \$159 million for home use. Most of this food is produced outside the region, so Borough consumers spend well over \$250 million per year buying food sourced far away. Only \$564,000 of food products (6% of farm cash receipts and 0.2% of the region's consumer market) are sold by farmers directly to consumers.

Estimated change in net assets (that is, assets minus liabilities) for all Borough households combined was a gain of \$85 million in 2011 (BLS).

Farm and food economy summary:

Farmers lose \$1 million each year producing food commodities, and spend \$5 million buying inputs sourced outside of the region. Even when farmers make money, these input purchases result in substantial losses to the region as a whole. Overall, farm production creates a loss of \$6 million to the region.

Meanwhile, consumers spend \$250 million buying food from outside. Thus, total loss to the region is \$255 million of potential wealth *each year*. This loss amounts to *28 times* the value of all food commodities raised in the region.

Fairbanks North Star Borough: markets for food eaten at home (2011):

North Star Borough residents purchase \$274 million of food each year, including \$159 million to eat at home. Home purchases break down in the following way:

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 33
Fruits & vegetables	32
Cereals and bakery products	20
Dairy products	18
“Other,” incl. Sweets, fats, & oils	56

If Fairbanks North Star Borough residents purchased \$5.00 of food for home use directly from farmers in the region, this would generate \$26 million of new farm income for the region. This is three times current farm revenues.

Fairbanks Region: markets for food eaten at home (2011):

[This includes Denali Borough, North Star Borough, and the Southeast Fairbanks Census Area]

Fairbanks region residents purchase \$300 million of food each year, including \$174 million to eat at home. Home purchases break down in the following way:

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 36
Fruits & vegetables	34
Cereals and bakery products	22
Dairy products	19
“Other,” incl. Sweets, fats, & oils	62

Alaska Interior Region: markets for food eaten at home (2011):

[This includes Denali Borough, North Star Borough, the Southeast Fairbanks Census Area, and the Yukon-Koyukuk Census Area. This corresponds with Census of Agriculture boundaries.]

Interior Region residents purchase \$315 million of food each year, including \$183 million to eat at home. Home purchases break down in the following way:

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 38
Fruits & vegetables	36
Cereals and bakery products	24
Dairy products	20
“Other,” incl. Sweets, fats, & oils	65

Anchorage: markets for food eaten at home (2011):

Anchorage residents purchase \$817 million of food each year, including \$474 million to eat at home. Home purchases break down in the following way:

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 99
Fruits & vegetables	94
Cereals and bakery products	61
Dairy products	52
“Other,” incl. Sweets, fats, & oils	168

State of Alaska: markets for food eaten at home (2011):

Alaska residents purchase \$2.0 billion of food each year, including \$1.2 billion to eat at home. Home purchases break down in the following way:

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 241
Fruits & vegetables	229
Cereals and bakery products	150
Dairy products	127
“Other,” incl. Sweets, fats, & oils	412

Key data sources:

Bureau of Economic Analysis data on farm production balance

<http://www.bea.doc.gov/bea/regional/reis/>

Food consumption estimates from Bureau of Labor Statistics Consumer Expenditure Survey

<http://www.bls.gov/cex/home.htm>

U.S. Census of Agriculture

<http://www.nass.usda.gov/census/>

USDA/Economic Research Service food consumption data:

<http://www.ers.usda.gov/data/foodconsumption/>

USDA/ Economic Research Service farm income data:

<http://ers.usda.gov/Data/FarmIncome/finfidmu.htm>

For more information:

To see results from *Finding Food in Farm Country* studies in other regions of the U.S.:

<http://www.crcworks.org/?submit=fffc>

To read the original *Finding Food in Farm Country* study from Southeast Minnesota (written for the Experiment in Rural Cooperation): <http://www.crcworks.org/ff.pdf>

To view a PowerPoint presented in March, 2008, by Ken Meter at Rep. Collin Peterson's (D-MN) Minnesota agricultural forum, called the "Home Grown Economy":

<http://www.crcworks.org/crcppts/petersonkm08.pdf>

For further information: <http://www.crcworks.org/>

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