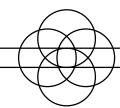
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Tools for Community Self-determination

Inland Northwest Region (Washington) Local Farm & Food Economy

by Ken Meter, Crossroads Resource Center (Minneapolis)¹ for

Spokane Regional Food Policy Council²

September 15, 2014

Covers Adams, Ferry, Lincoln, Pend Oreille, Spokane, Stevens, & Whitman Counties in Washington State

Inland Northwest Region (Bureau of Economic Analysis, 2012)

616,006 residents receive \$22.5 billion of income annually. Personal income increased 170% from 1969 to 2012, after dollars were adjusted for inflation. This increase is in part due to population increases, but also workers earn more money. The largest source of personal income is transfer payments (largely public programs), at \$5 billion. The next largest source is capital income (from interest, rent or dividends), totaling \$4.8 billion. Government jobs rank third, with \$3.6 billion of personal income. Manufacturing jobs produce \$1.3 billion of personal income, while retail workers earn \$1 billion. Note that income from public sources makes up 38% of all personal income in the region.

Income earned from transfer payments includes \$1.8 billion of retirement and disability insurance benefits; \$2 billion of medical benefits; \$645 million of income maintenance benefits; \$197 million of unemployment insurance; and \$214 million of veterans' benefits.

Government income includes \$500 million of income earned by federal workers and \$2.8 billion earned by state and local government workers. Military personnel earn \$300 million of personal income.

Although population has increased more than 71% since 1969, public planning to assure a secure and stable food supply is only starting to get underway.

Issues affecting low-income residents of the Inland Northwest Region:

Over 197,000 residents (34% of the five-year average population) live in households where the breadwinner(s) 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 \$414 million each year buying food, including \$188 million of SNAP benefits (formerly known as food stamps) in 2012 and additional WIC coupons. Food stamp use has risen sharply in the past decade. The

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¹ Considerable research assistance provided by Nick Wojciak.

² Funding for this study was provided by the Centers for Disease Control and Prevention.

region's 6,997 farmers receive an annual combined total of \$127 million in subsidies (24-year average, 1989-2012), mostly to raise crops such as corn, wheat, or soybeans that are sold as commodities, not to feed local residents. *Data from Federal Census of 2008-2012, Bureau of Labor Statistics, & Bureau of Economic Analysis.*

8.6% percent of the region's households (nearly 54,000 residents) earn less than \$10,000 per year. *Source: Federal Census of 2008-2012.*

22.5% of adults aged 18-64 in the Spokane metro area (MSA³) carried no health insurance in 2010; this was up from 14.6% in 2003. *Source: Centers for Disease Control.*

Food-related health conditions:

22% of the metro area's residents reported in 2009 that they eat five or more servings of fruit or vegetables each day. 78% do not. This level of adequate consumption is higher than the 2003 rate of 20%. 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.*

54% of Spokane metro area adults reported in 2009 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 about the same as the rate of 53% in 2003. *Source: Centers for Disease Control.*

8.3% of the metro area's residents have been diagnosed with diabetes as of 2010. This is an increase from the 2003 rate of 6.5%. *Source: Centers for Disease Control.* Medical costs for treating overweightness, obesity, diabetes and related conditions in Washington State total \$5.1 billion. *Source: American Diabetes Association.*

61% of Spokane metro region residents were overweight (32%) or obese (29%) in 2012. The results from 2012 do not appear to be comparable to results from 2010 and earlier years, as reported in our prior review of the Inland Northwest Region (called the Spokane Region in that prior study). *Source: Centers for Disease Control.*

The region's farms (USDA/NASS Census of Agriculture, 2012)

Agricultural Census data for 2012 were released May 2, 2014

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:

• 6,997 farms. This is 19% of Washington farms.

- The Inland Northwest Region had 2% fewer farms in 2012 than in 2007.
- 1,140 (16%) of these are 1,000 acres or more in size.

³ Health data (only) are reported for the Metropolitan Statistical Area that includes Pend Oreille, Spokane, and Stevens Counties.

- 2,737 (39%) farms are less than 50 acres.
- Average farm size is 761 acres, nearly double the state average of 396 acres.
- The has 5.3 million acres of land in farms.
- This amounts to 36% of the state's farmland.
- The Inland Northwest Region holds 1.8 million acres of harvested cropland.
- 187,000 of these acres are irrigated.
- Average value of land and buildings per farm was \$1 million. This was more than the 2012 state average of \$910,000.

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 \$1.2 billion of crops and livestock in 2012.
- Farm product sales increased by 35% from 2007 to 2012.
- \$1 billion of crops were sold.
- \$158 million of livestock and products were sold.
- 4,488 (64%) of the region's farms sold less than \$10,000 of products in 2012.
- Total sales from these small farms were at least \$7.8 million, more than 1% of the region's farm product sales. Note that data for sales from farms selling less than \$10,000 worth of product in Ferry County were suppressed by the USDA in an effort to protect confidentiality, so this total and percentage are incomplete.
- 1,409 (20%) of the region's farms sold more than \$100,000 of products.
- Total sales from these larger farms were at least \$1.1 billion, more than 96% of the region's farm product sales. Note that data for sales from farms selling more than \$100,000 worth of product in Ferry and Pend Oreille counties were suppressed by the USDA in an effort to protect confidentiality, so this total and percentage are incomplete.
- 51% of the region's farms (3,534 of 6,997) reported net losses in 2012. This is less than the Washington state average of 62%.
- 2,918 (42%) of Inland Northwest Region's farmers collected a combined total of \$73 million of federal subsidies in 2012.

Top farm products of Inland Northwest Region (2012).

Note: ** denotes sales data has been suppressed.

Product	\$ Millions
Wheat	**592
Vegetables	**111
Legumes & oil crops	**92
Forage Crops (hay, etc.)	**71
Fruits & Tree Nuts	**67
Cattle & calves	49
Corn	**16
Ornamentals	**15
Barley	**14

Production Expenses:

- Fertilizer, lime, and soil conditioners were the largest single expense for Inland Northwest Region farmers in 2012, totaling \$141 million (16% of production expenses).
- Hired farm labor ranked as the second most important expense, at \$95 million (11%).
- Chemical purchases totaled \$93 million (11%).
- Farmers charged \$83 million to depreciation (9%).
- Supplies, repairs, and maintenance cost farmers \$81 million (9%).
- Gasoline, fuels, and oil costs totaled \$66 million (8%).
- Land and building rentals totaled \$63 million (7%).
- Feed purchases cost farmers at least \$63 million (7%). Note that data for feed purchases in Lincoln County were suppressed by the USDA In an effort to protect confidentiality, so this total and percentage are incomplete.
- Seed purchases were \$51 million (6%).

Cattle & Dairy:

- 1,912 farms hold an inventory of 127,000 cattle.
- 82,000 cattle were sold by farmers in 2012 for total sales of \$49 million.
- 1,563 farms raise beef cows.
- 85 farms raise milk cows.
- 19 farms produced corn for silage.
- 2,286 farms produced 460,000 tons of forage crops (hay, etc.) on 182,000 acres.
- 1,857 farms sold at least \$71 million of forage. Note that data for sales of forage in Ferry County were suppressed by the USDA in an effort to protect confidentiality, so this total is incomplete.

Other Livestock & Animal Products:

- 139 farms hold an inventory of at least 5,520 hogs and pigs. Note that data for inventory of hogs and pigs in Adams, Pend Oreille, and Stevens counties were suppressed by the USDA in an effort to protect confidentiality, so this total is incomplete.
- 185 farms sold at least 10,000 hogs and pigs in 2012. Note that data for hogs and pigs sold in Adams County were suppressed by the USDA in an effort to protect confidentiality, so this total is incomplete.
- 337 farms hold an inventory of 12,000 sheep and lambs.
- 325 farms sold \$1.8 million worth of sheep, goats, and lambs in 2012.
- 998 farms hold an inventory of at least 17,000 laying hens. Note that data for inventory of laying hens in Adams County were suppressed by the USDA in an effort to protect confidentiality, so this total is incomplete.
- 75 farms raise broiler chickens.
- 15 farms engage in aquaculture.
- 398 farms raise horses and ponies.

Grains, Oil Seeds, & Edible Beans:

- 1,612 farms produced at least \$753 million of grains, oil seeds, and edible beans. Note that data for sales of grains, oil seeds, and edible beans in Ferry and Pend Oreille counties were suppressed by the USDA in an effort to protect confidentiality, so this total is incomplete.
- 70 farms produced at least 2.3 million bushels of corn on over 14,000 acres, worth more than \$16 million. Note that data for bushels and acreage of corn in Ferry, Lincoln, Spokane, and Whitman counties, and sales of corn in Ferry, Spokane, Stevens, and Whitman counties were suppressed by the USDA in an effort to protect confidentiality, so these totals are incomplete.
- 1,423 farms produced 79 million bushels of wheat on 1.2 million acres, worth more than \$592 million. Note that data for sales of wheat in Ferry County were suppressed by the USDA in an effort to protect confidentiality, so this total is incomplete.
- 591 farms produced at least 10 million bushels of barley on more than 146,000 acres, worth over \$14 million. Note that data for bushels and acreage of barley in Ferry and Pend Oreille counties, and data for sales of barley in Ferry, Pend Oreille, Spokane, and Whitman counties were suppressed by the USDA in an effort to protect confidentiality, so these totals are incomplete.

V egetables ${\mathfrak G}$ Melons (some farmers state that Ag Census data does not fully represent vegetable production):

- 308 farms worked 33,000 acres to produce vegetables, worth at least \$111 million. Most of this production was exported outside of the region. Note that data for sales of vegetables in Ferry, Stevens, and Whitman counties were suppressed by the USDA in an effort to protect confidentiality, so this total is incomplete.
- This represents a 65% increase in the number of farms (from 191) over 2007 levels.
- 161 farms raised potatoes.

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

- 223 farms in the region hold 6,698 acres of orchards.
- 256 farms sold at least \$67 million of fruits, nuts, and berries. Note that data for sales of fruits, nuts, and berries in Pend Oreille, Stevens, and Whitman counties were suppressed by the USDA in an effort to protect confidentiality, so this total is incomplete.

Nursery & Greenhouse Plants:

- 141 farms sold at least \$15 million worth of ornamentals in 2012. Note that data for sales of ornamentals in Pend Oreille County were suppressed by the USDA in an effort to protect confidentiality, so this total is incomplete.
- This represents an increase of 37% in the number of farms (from 103) over 2007.
- 27 farms sold Christmas trees.

Direct & Organic Sales:

- 765 farms sell \$4.15 million of food products directly to consumers. This is an 11% increase of number of farms (688 in 2007) selling direct, and a 5% decrease in direct sales from 2007 sales of \$4.37 million.
- This amounts to 0.4% of farm product sales, more than the national average of 0.3%.
- Spokane County leads the region in direct sales, with \$2.3 million.
- 54 farms in the region sold \$12.4 million of organic products.
- 30 farms market through community supported agriculture (CSA).
- 290 farms produce and sell value-added products.
- 159 farms marketed products directly to retail outlets.
- 72 farms had on-farm packing facilities.

Conservation Practices:

- 872 farms practice rotational or management intensive grazing.
- 13 farms practiced alley cropping or silvopasture.
- 40 farms harvested biomass for use in renewable energy.

Operations by Legal Status for Tax Purposes in the Inland Northwest Region. (Census of Agriculture, 2012)

	Farms	Acres
Family or individual	5,392	**1,072,327
Partnership	497	1,074,358
Corporation (family held)	885	**1,613,159
Corporation (other than family held)	34	38,328
Other – cooperative, estate or trust, institutional, etc.	189	**49,088
Totals	6,997	**3,847,260

Note: Data covering limited resource farms that was reported in the 2007 Census of Agriculture, and included in our previous study, is no longer published by county. The above data is the closest similar data set available.

County and State Highlights

Adams County highlights (Agriculture Census 2012):

- 713 farms, 9% less than in 2007.
- Adams County has 1 million acres of land in farms.
- Farmers sold \$430 million of products in 2012.
- \$340 million (79%) of these sales were crops.
- \$90 million (21%) of these sales were livestock.
- The most prevalent farm size is 1,000 acres or more, with 226 farms (32%) in this category.
- The next most prevalent is 50 to 179 acres, with 133 (19%) farms.
- 127 farms (18%) are less than 50 acres.
- 353 farms (50%) sold less than \$10,000 in farm products.
- 281 farms (39%) sold more than \$100,000 in farm products.
- Adams County ranks 6th in the United States, and 2nd in Washington, for acreage of winter wheat, with 259,000.
- The county ranks 1st in the state for inventory of pullets for laying flock replacement, but inventory figures were suppressed by the USDA in an effort to protect confidentiality.
- Adams County ranks 2nd in the state for sales of hogs and pigs, but *sales figures were suppressed* by the USDA in an effort to protect confidentiality.
- The county ranks third in the state for acreage of wheat, with 277,000.
- Adams County ranks third in the state for inventory of laying hens, but *inventory figures were* suppressed by the USDA in an effort to protect confidentiality.
- The county ranks fourth in Washington for sales of grains, oilseeds, dry beans, and dry peas, with \$144 million.
- Adams County ranks fourth in the state for sales of vegetables, with \$101 million.
- The county ranks fourth in the state for sales of poultry and eggs, but sales figures were suppressed by the USDA in an effort to protect confidentiality.
- Adams County ranks 4th in the state for acreage of vegetables, with 29,000.
- The county ranks fourth in the state for acreage of potatoes, with 26,000.
- Adams County ranks sixth in the state for sales of agricultural products, with \$430 million.
- The county ranks sixth in Washington for sales of forage crops (hay, etc.) with \$30 million.
- Adams County ranks 6th in the state for sales of cattle and calves, but sales figures were suppressed by the USDA in an effort to protect confidentiality.
- The county ranks seventh in Washington for crop sales, with \$340 million.
- Adams County ranks 7th in the state for sales of livestock and their products, with \$90 million.
- The county ranks seventh in the state for inventory of cattle and calves, with 46,000.

- 27 farms sold \$115,000 of food directly to consumers. This is an 8-farm decrease in the number of farms selling direct, and a 90% decrease in direct sales, from 2007 sales of \$1.17 million.
- Direct sales were 0.03% of farm product sales, far less than the national average of 0.3%.

Ferry County highlights (Agriculture Census 2012):

- 255 farms, 10% more than in 2007.
- Ferry County has 792,000 acres of land in farms.
- Farmers sold \$5.3 million of products in 2012.
- \$2.88 million (54%) of these sales were crops.
- \$2.45 million (46%) of these sales were livestock.
- The most prevalent farm size is 50 to 179 acres, with 94 farms (37%) in this category.
- The next most prevalent is 10 to 49 acres, with 54 (21%) farms.
- 28 farms (11%) are 1,000 acres or more.
- 71 farms (28%) are less than 50 acres.
- 183 farms (72%) sold less than \$10,000 in farm products.
- 19 farms (7%) sold more than \$100,000 in farm products.
- 33 farms sold \$410,000 of food directly to consumers. This is a 4-farm decrease in the number of farms selling direct, and a 260% increase in direct sales, over 2007 sales of \$114,000.
- Direct sales were 7.7% of farm product sales, much higher than the national average of 0.3%.

Lincoln County highlights (Agriculture Census 2012):

- 897 farms, 12% more than in 2007.
- Lincoln County has 1.1 million acres of land in farms.
- Farmers sold \$183.2 million of products in 2012.
- \$173.6 million (95%) of these sales were crops.
- \$9.6 million (5%) of these sales were livestock.
- The most prevalent farm size is 1,000 acres or more, with 325 farms (36%) in this category.
- The next most prevalent is 50 to 179 acres, with 174 (19%) farms.
- 150 farms (17%) are less than 50 acres.
- 480 farms (54%) sold less than \$10,000 in farm products.
- 303 farms (34%) sold more than \$100,000 in farm products.
- Lincoln County ranks 1st in Washington for inventory of chukar partridges, but inventory figures were suppressed by the USDA in an effort to protect confidentiality.
- The county ranks second in the state for acreage of wheat, with 326,000.

- Lincoln County ranks second in the state for acreage of spring wheat, with 99,000.
- The county ranks second in the state for acreage of barley, with 33,000.
- Lincoln County ranks 3rd in the state for sales of grains, oilseeds, dry beans, and dry peas, with \$159 million.
- The county ranks third in Washington for acreage of winter wheat, with 227,000.
- Lincoln County ranks 5th in the state for inventory of pheasants, but inventory figures were suppressed by the USDA in an effort to protect confidentiality.
- The county ranks ninth in the state for sales of forage crops (hay, etc.), with \$9 million.
- 22 farms sold \$151,000 of food directly to consumers. This is a 7-farm decrease in the number of farms selling direct, and a 5% decrease in direct sales, from 2007 sales of \$159,000.
- Direct sales were 0.1% of farm product sales, one-third the national average of 0.3%.

Pend Oreille County highlights (Agriculture Census 2012):

- 288 farms, 9% less than in 2007.
- Pend Oreille County has 44,000 acres of land in farms.
- Farmers sold \$3.954 million of products in 2012.
- \$2.32 million (59%) of these sales were crops.
- \$1.64 million (41%) of these sales were livestock.
- The most prevalent farm size is 50 to 179 acres, with 115 farms (40%) in this category.
- The next most prevalent is 10 to 49 acres, with 113 (39%) farms.
- 7 farms (2%) are 1,000 acres or more.
- 131 farms (45%) are less than 50 acres.
- 244 farms (85%) sold less than \$10,000 in farm products.
- 7 farms (2%) sold more than \$100,000 in farm products.
- 48 farms sold \$71,000 of food directly to consumers. This is an 8-farm increase in the number of farms selling direct, and a 29% increase in direct sales, over 2007 sales of \$55,000.
- Direct sales were 1.8% of farm product sales, six times the national average of 0.3%.

Spokane County highlights (Agriculture Census 2012):

- 2,501 farms, 1 less farm than in 2007.
- Spokane County has 537,000 acres of land in farms.
- Farmers sold \$150 million of products in 2012.
- \$133 million (89%) of these sales were crops.
- \$17 million (11%) of these sales were livestock.
- The most prevalent farm size is 10 to 49 acres, with 1,061 farms (42%) in this category.
- The next most prevalent is 50 to 179 acres, with 537 (21%) farms.

- 126 farms (5%) are 1,000 acres or more.
- 1,493 farms (60%) are less than 50 acres.
- 1,860 farms (74%) sold less than \$10,000 in farm products.
- 232 farms (9%) sold more than \$100,000 in farm products.
- Spokane County ranks 6th in the United States, and 2nd in Washington for acreage of lentils, but acreage figures were suppressed by the USDA in an effort to protect confidentiality.
- The county ranks second in Washington for sales of sheep and goats, with \$661,000.
- Spokane County ranks second in the state for inventory of horses, with 5,453.
- The county ranks third in the state for acreage of spring wheat, with 60,000.
- Spokane County ranks third in the state for acreage of forage crops (hay, etc.), with 59,000.
- The county ranks fourth in the state for sales of horses, with \$1.2 million.
- Spokane County ranks sixth in Washington for sales of grains, oilseeds, dry beans, and dry peas, with \$98 million.
- The county ranks 6th in the state for acreage of wheat, with 159,000.
- Spokane County ranks sixth in the state for inventory of bee colonies, with 3,437.
- The county ranks seventh in the state for acreage of winter wheat, with 99,000.
- Spokane County ranks 8th in the state for sales of ornamentals, with \$13 million.
- The county ranks eighth in Washington for sales of forage crops, with \$15 million.
- 406 farms sold \$2.3 million of food directly to consumers. This is a 29% increase in the number of farms selling direct (315 in 2007), and a 40% increase in direct sales over 2007 sales of \$1.6 million.
- Direct sales were 1.5% of farm product sales, five times the national average of 0.3%.

Stevens County highlights (Agriculture Census 2012):

- 1,148 farms, 9% less than in 2007.
- Stevens County has 527,000 acres of land in farms.
- Farmers sold \$36.3 million of products in 2012.
- \$17.4 million (48%) of these sales were crops.
- \$18.9 million (52%) of these sales were livestock.
- The most prevalent farm size is 10 to 49 acres, with 412 farms (36%) in this category.
- The next most prevalent is 50 to 179 acres, with 356 (31%) farms.
- 53 farms (5%) are 1,000 acres or more.
- 508 farms (44%) are less than 50 acres.
- 777 farms (68%) sold less than \$10,000 in farm products.
- 84 farms (7%) sold more than \$100,000 in farm products.
- Stevens County ranks 2nd in Washington for inventory of of sheep and lambs, with 3,839.

- The county ranks fourth in the state for sales of hogs and pigs, but sales figures were suppressed by the USDA in an effort to protect confidentiality.
- Stevens County ranks fourth in the state for sales of sheep and goats, with \$464,000.
- The county ranks fourth in Washington for acreage of barley, with 5,400.
- Stevens County ranks 5th in the state for acreage of forage crops (hay, etc.), with 42,000.
- The county ranks tenth in the state for inventory of bee colonies, with 1,755.
- 172 farms sold \$866,000 of food directly to consumers. This is a 6-farm decrease in the number of farms selling direct, and a 6% decrease in direct sales, from 2007 sales of \$922,000.
- Direct sales were 2.4% of farm product sales, 8 times the national average of 0.3%.

Whitman County highlights (Agriculture Census 2012):

- 1,195 farms, 4% less than in 2007.
- Whitman County has 1.3 million acres of land in farms.
- Farmers sold \$371 million of products in 2012.
- \$352.4 million (95%) of these sales were crops.
- \$18.4 million (5%) of these sales were livestock.
- The most prevalent farm size is 1,000 acres or more, with 375 farms (31%) in this category.
- The next most prevalent is 180 to 499 acres, with 230 (19%) farms.
- 257 farms (22%) are less than 50 acres.
- 591 farms (49%) sold less than \$10,000 in farm products.
- 483 farms (40%) sold more than \$100,000 in farm products.
- Whitman County ranks 3rd in the United States and 1st in Washington for acreage of wheat, with 441,000.
- The county ranks third in the country and first in the state for acreage of winter wheat, with 307,000.
- Whitman County ranks fifth in the country and 1st in the state for acreage of dry edible beans (excluding lima beans) with 65,000.
- The county ranks sixth in the United States and first in the state for acreage of barley, with 84,000.
- Whitman County ranks 1st in Washington for acreage of spring wheat, with 134,000.
- The county ranks first in the state for sales of grains, oilseeds, dry beans, and dry peas, with \$347 million.
- Whitman County ranks first in the state for inventory of quail, but *inventory figures were* suppressed by the USDA in an effort to protect confidentiality.
- The county ranks first in the state for sales of hogs and pigs, with \$977,000.
- Whitman County ranks second in the state for inventory of hogs and pigs, with 4,681.
- The county ranks 4th in the state for inventory of sheep and lambs, with 2,464.

- Whitman County ranks sixth in Washington for crop sales, with \$352 million.
- The county ranks sixth in the state for sales of sheep and goats, with \$380,000.
- Whitman county ranks 7th in Washington for sales of agricultural products, with \$371 million.
- 57 farms sold \$245,000 of food directly to consumers. This is a 3-farm increase in the number of farms selling direct, and a 20% decrease in direct sales, from 2007 sales of \$308,000.
- Direct sales were 0.1% of farm product sales, one-third the national average of 0.3%.

State of Washington highlights (Agriculture Census 2012):

- 37,249 farms, 5% less than in 2007.
- Washington has 15 million acres of land in farms.
- Farmers sold \$9.1 billion of products in 2012.
- \$6.5 billion (71%) of these sales were crops.
- \$2.6 billion (29%) of these sales were livestock.
- The most prevalent farm size is 10 to 49 acres, with 12,980 farms (35%) in this category.
- The next most prevalent is 1 to 9 acres, with 10,559 (28%) farms.
- 2,594 farms (7%) are 1,000 acres or more.
- 23,539 farms (63%) are less than 50 acres.
- 24,526 farms (66%) sold less than \$10,000 in farm products.
- 6,102 farms (16%) sold more than \$100,000 in farm products.
- Washington ranks 1st in the United States for aquaculture sales, with \$187 million.
- The state ranks second in the U.S. for sales of fruits, tree nuts, and berries, with \$2.9 billion.
- Washington ranks third in the country for sales of vegetables, with \$1.1 billion.
- The state ranks third in the country for acreage of vegetables, with 352,000.
- Washington ranks fifth in the country for sales of Christmas trees, with \$19 million.
- The state ranks 5th in the country for acreage of spring wheat, with 514,000.
- Washington ranks sixth in the United States for acreage of winter wheat, with 1.7 million.
- The state ranks seventh in the country for acreage of wheat, with 2.2 million.
- Washington ranks eighth in the country for sales of forage crops (hay, etc.), with \$671 million.
- The state ranks ninth in the United States for inventory of bee colonies, with 97,000.
- 5,640 farms sold \$45.1 million of food directly to consumers. This is a 4% increase in the number of farms selling direct (5,418 in 2007), and a 4% increase in direct sales over 2007 sales of \$43.5 million.
- Direct sales were 0.5% of farm product sales, more than the national average of 0.3%.
- Statewide vegetable sales totaled \$1.1 billion.
- If direct food sales made up a single commodity, the value of these sales would outrank the state's 23rd most important product, peppermint.
- 674 farms farm organically.
- 388 farms market through community supported agriculture (CSA).
- 2,267 farms produce and sell value-added products.
- 1,654 farms marketed products directly to retail outlets.
- 756 farms had on-farm packing facilities.
- 5,798 farms practice rotational or management intensive grazing.
- 82 farms practiced alley cropping or silvopasture.
- 253 farms harvested biomass for use in renewable energy.

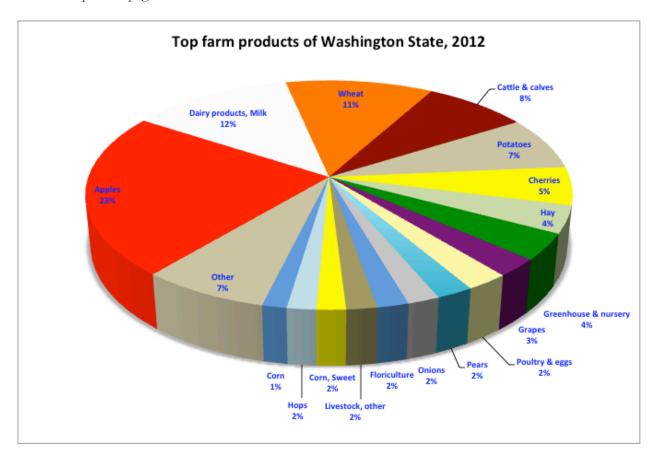
Washington State's top farm products in 2012 (Economic Research Service) See chart on next page.

		\$ millions
1	Apples	2,146.9
2	Dairy products & Milk	1,156.5
3	Wheat	1,060.0
4	Cattle & calves	744.8
5	Potatoes	694.9
6	Cherries	499.1
7	Hay	359.0
8	Greenhouse & nursery	347.1
9	Grapes	235.9
10	Poultry & eggs	227.7
11	Pears	197.0
12	Onions	171.2
13	Floriculture	167.5
14	Livestock, other	163.2
15	Corn, Sweet	155.3
16	Hops	155.0
17	Corn	130.8
18	Crops, other	87.1
19	Blueberries	85.4
20	Dry beans	76.9
21	Mint	75.6
22	Barley	53.8
23	Peppermint	40.9
24	Raspberries	37.9
25	Peas, Green	35.3
26	Spearmint	34.8
27	Dry peas	30.9
28	Lentils (Beans)	23.3
29	Mushrooms	20.0
30	Asparagus	18.2

Note also that at \$45 million, direct sales from farmers to consumers amount to more than the value of the 23rd-ranking product, peppermint.

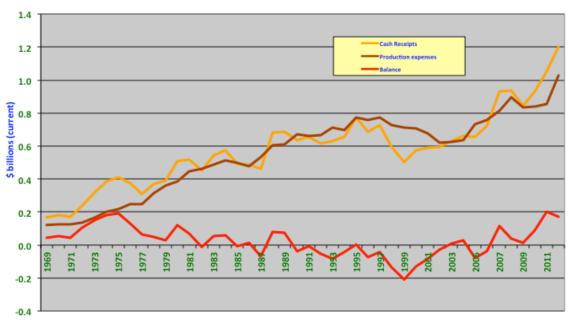
Source: USDA Economic Research Service

Washington State's top farm products in 2012 (Economic Research Service) See table on previous page



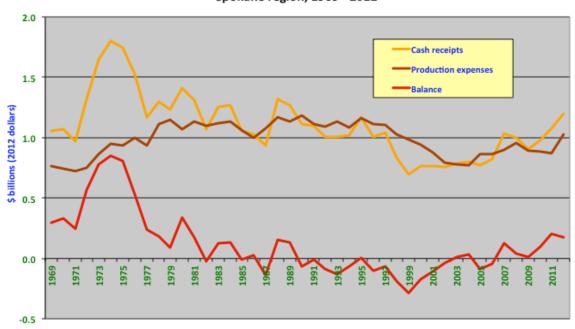
Source: USDA Economic Research Service

Farm Production Balance in Spokane region, 1969-2012



Source: Bureau of Economic Analysis: data in dollars current for each year shown

Farm Production Balance in Spokane region, 1969 - 2012



Source: Bureau of Economic Analysis (adjusted for inflation)

Balance of Cash Receipts and Production Costs (BEA):

Please see charts on previous page.

Inland Northwest Region farmers sell \$955 million of food commodities per year (1989-2012 average), spending \$981 million to raise them, for an average loss of \$26 million each year. This is an average net loss of \$3,715 per farm. Note that these sales figures compiled by the BEA may differ from cash receipts recorded by the USDA Agriculture Census (above).

Overall, farm producers lost \$600 million by selling crops and livestock over the years 1989 to 2012. Farm production costs exceeded cash receipts for 15 years of that 24-year period. Moreover, 51% of the region's farms reported that they lost money in 2012 (Ag Census), one of the best farming years in recent memory. Looking at long-term trends, Inland Northwest Region farmers and ranchers earned \$120 million less by selling commodities in 2012 than they had earned in 1969 (in 2012 dollars), despite unusually high grain prices.

Farmers and ranchers earn another \$88 million per year of farm-related income — primarily custom work, and rental income (24-year average for 1989-2012). Federal farm support payments are a far more important source of net income than commodity production, averaging \$127 million per year for the region for the same years.

The charts on the previous page show cash receipts, production expenses, and net cash income (that is, cash receipts less production expenses, called "farm production balance" on the charts) for farmers in the Inland Northwest Region from 1969 to 2012. Data are from the Bureau of Economic Analysis. The chart on the top of the page shows data in dollars current for each year shown. The chart at the bottom of the page shows the same data adjusted for inflation, using 2012 dollars, so the value of each dollar is constant across the chart.

Both charts are dominated by the economics of the wheat industry in the region, since wheat makes up for half of farm sales. This wheat data does not accurately portray the financial conditions for vegetable farmers who raise produce at larger scale, nor for small vegetable or meat growers raising food for local markets. Yet these overall trends offer critical perspective on the overall conditions in the farm economy, wholesale food costs, the potential of success for firms servicing the agricultural community, potential tax base for counties in the region, and changes in land and farm input prices, all of which affect growers raising food for local markets.

Note that the chart on the top of the page shows that farm cash receipts rose steadily from 1969 to 1995, then fell until 1999, and slowly recovered in recent years as grain prices increased. Note also that farm production expenses rose when cash receipts increased, meaning the farm sector could not really build lasting wealth — net returns fell steadily from 1974 to 1999. Net cash income in 2011 rivaled the net income earned in 1973, when grain prices were high because Inland Northwest Region farmers, along with others in the U.S., were exporting wheat to the Soviet Union during the energy crisis.

Once this data is adjusted for inflation, however, very different patterns appear, as the second chart at the bottom of the page shows. Note that once adjusted, BEA data show that cash receipts for Inland Northwest Region farmers have held fairly steady since 1977. Production costs have declined somewhat, in part due to effective management by the region's farmers, especially more effective use of energy, but also because farms have gone out of business. Dollars in 1973 were worth six times the value of dollars in 2012, so the peak year of farm income in 1973 looks all the more significant.

In that single year, Inland Northwest Region farmers earned a surplus of \$848 million. In recent years, this would rival the *total value* of cash receipts — but also is 33 times the value of the average *loss* Inland Northwest Region farmers have suffered since 1989.

Moreover, the only years in which farmers earned significant money are years in which grain prices were unusually high. At typical price levels, farmers earned little, or lost money, farming. This second chart shows that there has been no sustained growth in the farm sector for over 40 years — just termporary price spikes. Now that grain prices are falling again, a return to typical trends seems likely.

The region's consumers:

See also information covering low-income food consumption and food-related health conditions, page 1-2 above. As shown on the next page, Inland Northwest Region consumers spend \$1.7 billion buying food each year, including \$1.0 billion for home use. Most of this food is produced outside the region, so Inland Northwest Region consumers spend at least \$1.5 billion per year buying food sourced far away. This figure is calculated using the very conservative estimate that roughly 90% of the food consumed in Inland Northwest Region is sourced outside of the region. Only \$4.2 million of food products (0.4% of farm cash receipts and 0.2% of the region's consumer market) are sold by farmers directly to household consumers.

Estimated change in net assets (that is, assets minus liabilities) for all region households combined was a loss of \$1.9 billion in 2012 alone (BLS). This places additional pressure on Inland Northwest Region consumers trying to buy food.

Farm and food economy summary:

As stated above, farmers lose \$26 million each year producing food commodities, but gain \$127 million in federal subsidies, while spending \$560 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 potential wealth of \$460 million to the region. This is calculated using the \$127 gain from subsidies, offset by the \$26 million loss, for a net gain of \$100 million, due primarily to federal supports — although of course farm families also rely heavily on off-farm sources of income to meet their household budgets. Subtracting the production expenses for buying products that are sourced outside of the Inland Northwest Region yields the total loss to the farm sector of \$460 million.

Meanwhile, consumers spend \$1.5 billion buying food from outside. Thus, total loss to the region is \$1.9 billion of potential wealth *each year*. This loss amounts to twice the value of all food commodities raised in the region.

Key changes since the 2007 Census:

Data compiled using results of the 2012 Census of Agriculture show only small changes from 2007 results; long-term trends identified earlier still hold true. Recommendations made in our previous study, "Investing in Relationships" (December, 2013), still apply.

Among the key changes since 2007 data was compiled:

- The number of farms in the region decreased slightly.
- Cash receipts were 35% higher in 2012 than in 2007; yet this is mainly due to a short-term rise in wheat prices. Livestock sales remained quite steady. Grain prices in 2014 are far lower than 2012 levels, so this apparent increase in farm sales must be viewed with caution since it may not represent a long-term trend.
- Farm families continue to rely on off-farm income to meet household budgets.
- Average value of land and buildings on each farm in the Inland Northwest Region increased from \$888,000 in 2007 to \$1 million in 2012.
- The number of large farms over 1,000 acres declined from 1,206 to 1,140.
- The number of small farms of 50 acres or less increased from 2,562 to 2,737.
- The number of farms selling \$100,000 or more farm products increased from 1,262 to 1,409.
- The number of farms selling \$10,000 or less decreased from 4,739 to 4,488.
- Wheat production increased from 68 million bushels to 79 million bushels, and sales increased from \$390 million to \$592 million.
- Corn production increased from 1. 7 million bushels to 2.3 million bushels, and sales increased \$5 million.
- Despite increases in cash receipts, production costs often increased more rapidly than income: the chart below shows that labor costs, chemicals, feed, and seed all increased more than the 35% increase in sales.

Selected Production Expenses	2007 \$ mlns	2012 \$ mlns	Change \$ mlns	Percent
Fertilizer, lime, and soil conditioners	107	141	34	32%
Hired farm labor	65	95	30	46%
Chemicals purchased	57	93	36	63%
Depreciation expenses claimed (see text)	64	83	19	30%
Repairs, supplies, and maintenance costs	64	81	17	27%
Gasoline, fuels, and oil purchased	52	66	14	27%
Cash rent for land, buildings, and	57	63	6	11%
Feed purchased	45	63	18	40%
Seeds, plants, vines, and trees purchased	37	51	14	38%
Totals	548	736	188	34%

• Since most of these inputs are sourced outside of Inland Northwest Region, increased sales of farm commodities also prompted farms to spend more money outside the region

- purchasing farm inputs conservatively estimated at \$425 million in 2007, and \$560 million in 2012. Actual totals could well be higher.
- Overall losses for farm production since 1989 were calculated at \$1 billion in the prior report, and now are estimated to be \$660 million. This decrease is primarily due to higher wheat prices, a short-term trend.
- Vegetable sales rose from \$101 million to \$111 million, even though acreage planted was reduced from 41,000 to 33,000. The number of farms reporting vegetable sales rose from 186 to 308.
- The number of farms selling potatoes rose from 71 to 161.
- Fruit and nut sales rose from \$44 million to \$67 million, and the number of farms selling fruit increased from 215 to 256.
- The number of farms selling food directly to household customers increased 21% from 2002 to 2007, but rose only 11% from 2007 to 2012. Moreover, the value of these direct sales fell 5% from 2007 to 2012 to \$4.2 million.
- Direct sales in the Inland Northwest Region still surpass national levels.
- Showing that connection to consumers is critical in direct food sales, Spokane County farmers (not the entire region) increased direct sales from \$1.6 million to \$2.3 million.
- Direct sales in Adams County were reported as falling from \$1.2 million in 2007 to \$115,000 in 2012. This decline could easily be reporting or sampling error, since the Census of Agriculture uses only a sample of farms in each county. 2002 levels of direct sales in Adams County were recorded at \$164,000. An alternate explanation would be that more farmers are selling through wholesale channels rather than direct to household customers.
- Sales of organic products rose from \$4.1 million to \$12.4 million, although the number of farms selling organic products fell from 71 to 55.
- Cattle sales fell from \$67 million to \$49 million, even though the number of cattle sold rose from 66,000 to 82,000. This is a decline in average value per animal of \$1,015 in 2007 to \$598 in 2012. This could reflect selling more young animals, or selling off herds in bulk that could not profitably be fed due to high grain prices.

Similarities with the 2007 results were also found:

- Net cash income from farming is still below 1969 levels, once dollars are adjusted for inflation.
- More than half of the farms in the region lost money on production, so off-farm income continues to be an important source of income.
- The region continues to spend at least \$1.5 billion each year buying food sourced outside the region.
- Vegetables continue to be an important crop for the Inland Northwest Region, but are primarily shipped to other regions, rather than consumed here. Initial evidence suggests that some farms are producing more on fewer acres.
- SNAP coupon use continues to rise, but the increase is not as dramatic as it may appear since the pervous report used an average over 23 years, while the new report uses the most recent year a more accurate comparison given the rapid rise in SNAP use.

Key recommendations for 2014:

- Spokane should set aside farm land in and near the city as soon as possible to ensure that fertile soil with ample water and sunlight is protected to provide food for the region's residents. Specific locations are listed in the "Investing in Relationships" report.
- Fostering strong clusters of food-related businesses is still the most appropriate way to stem the financial losses inherent in the farm and food economy. This is long-term work and will not create dramatic victories quickly, but it is the precondition for future progress.
- The decline of direct sales from farmer to consumer seems to be part of a national trend, although it is possible that data tracking in the Census of Agriculture do not completely capture levels of direct sales, as noted above. Many farmers nationally report strong and rising direct sales. Evidence from the farm census, however, gives no clear indication that direct sales are on thie rise. While this make create new urgency for Spokane to develop food aggregation businesses, and to increase institutional sales, our data also show quite clearly that there is not at this time sufficient production to support a new "food hub." Growing this business will itself require long-term investment in new farm production at the local level.

According to the USDA's 2012 Regional Food Hub Resource Guide, "A regional food hub is a business or organization that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand." In fact, however, multiple local foods initiatives across the U.S. that claim to be building a "food hub" have something completely different in mind. Indeed, the term has so many uses it may well be meaningless. Our preference is to call an aggregation business an "aggregation business," and a distribution firm a "distribution business," and so forth, to minimize confusion.

"Food hub" leaders and industry consultants say that if such a "hub" (as defined by USDA) is to run as a self-sustaining business with its own facility, it may have to attain more than \$1.5 - \$5 million in annual sales. Below that level of sales, food hub initiatives may play a vital role in creating and implementing a vibrant vision for local food trade, but may depend heavily on subsidy from public and private sources. Often these early food hub initiatives play an essential role in connecting farmers with potential buyers, and should be supported for creating this groundwork, but cannot function as self-standing businesses until there is not sufficient production for local food trade to cover their operating costs.

Any successful facility that attempts to engage in "aggregation, distribution, and marketing of source-identified food products" as a business in its own facility requires a network of commercial relationships to support itself, including considerable production oriented toward local markets, on-farm infrastructure so farmers can prepare food shipments for larger customers, localized transportation routes, input dealers and lenders that are geared to farms engaged in local food trade, supportive nonprofits, public incentives and other support, knowledge and data, and many other elements. We call such a network a "food web."

Many aspiring "food hubs" launch themselves by offering an internet trading platform that allows farmers to communicate directly with potential buyers and make deals. Such a trading platform can be exceptionally valuable, and may well be the essential first step, but is not, in itself, a "food hub."

• While it is outside of the realm of actions that can be taken by local officials in the Inland Northwest Region, commodity farmers require better protection as they produce wheat, legumes, and other products for commercial processing, so that temporary price changes are not so critical to the fortunes of farmers and their communities.

Inland Northwest Region: markets for food eaten at home (2012):

Inland Northwest Region residents purchase \$1.7 billion of food each year, including \$1.0 billion to eat at home. Home purchases break down in the following way:

	millions
Meats, poultry, fish, and eggs	\$212
Fruits & vegetables	198
Cereals and bakery products	134
Dairy products	107
"Other," incl. Sweets, fats, & oils	362

If each region resident purchased \$5 of food each week directly from some farm in the region, this would generate \$160 million of new farm income for the region.

Adams County: markets for food eaten at home (2012):

Adams County residents purchase \$53 million of food each year, including \$31 million to eat at home. Home purchases break down in the following way:

	millions
Meats, poultry, fish, and eggs	\$ 7
Fruits & vegetables	6
Cereals and bakery products	4
Dairy products	3
"Other," incl. Sweets, fats, & oils	11

Ferry County: markets for food eaten at home (2012):

Ferry County residents purchase \$21 million of food each year, including \$13 million to eat at home. Home purchases break down in the following way:

	millions
Meats, poultry, fish, and eggs	\$ 3
Fruits & vegetables	2
Cereals and bakery products	2
Dairy products	1
"Other," incl. Sweets, fats, & oils	5

Lincoln County: markets for food eaten at home (2012):

Lincoln County residents purchase \$29 million of food each year, including \$17 million to eat at home. Home purchases break down in the following way:

	millions
Meats, poultry, fish, and eggs	\$ 4
Fruits & vegetables	3
Cereals and bakery products	2
Dairy products	2
"Other," incl. Sweets, fats, & oils	6

Pend Oreille County: markets for food eaten at home (2012):

Pend Oreille County residents purchase \$36 million of food each year, including \$21 million to eat at home. Home purchases break down in the following way:

	millions
Meats, poultry, fish, and eggs	\$ 4
Fruits & vegetables	4
Cereals and bakery products	3
Dairy products	2
"Other," incl. Sweets, fats, & oils	8

Spokane County: markets for food eaten at home (2012):

Spokane County residents purchase \$1.3 billion of food each year, including \$782 million to eat at home. Home purchases break down in the following way:

	millions
Meats, poultry, fish, and eggs	\$ 163
Fruits & vegetables	153
Cereals and bakery products	103
Dairy products	83
"Other," incl. Sweets, fats, & oils	279

Stevens County: markets for food eaten at home (2012):

Stevens County residents purchase \$121 million of food each year, including \$72 million to eat at home. Home purchases break down in the following way:

	millions
Meats, poultry, fish, and eggs	\$ 15
Fruits & vegetables	14
Cereals and bakery products	9
Dairy products	8
"Other," incl. Sweets, fats, & oils	26

Whitman County: markets for food eaten at home (2012):

Whitman County residents purchase \$130 million of food each year, including \$77 million to eat at home. Home purchases break down in the following way:

	millions
Meats, poultry, fish, and eggs	\$ 16
Fruits & vegetables	15
Cereals and bakery products	10
Dairy products	8
"Other," incl. Sweets, fats, & oils	27

Washington State: markets for food eaten at home (2012):

State residents purchase \$19 billion of food each year, including \$11 billion to eat at home. Home purchases break down in the following way:

	billions
Meats, poultry, fish, and eggs	\$ 2.4
Fruits & vegetables	2.2
Cereals and bakery products	1.5
Dairy products	1.2
"Other," incl. Sweets, fats, & oils	4.0

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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