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Tools for Community Self-determination

Boulder County Local Farm & Food Economy

Highlights of a data compilation

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for

Colorado State University Extension

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Boulder County: (Bureau of Economic Analysis)

286,000 residents receive \$14 billion of income annually (2006). Real personal income has quadrupled since 1969. Services are the largest contributor to personal income, with over \$4 billion. Interest, rent and dividend income amounts to \$3.5 billion. Over \$850 million (6%) of personal income is government payments. Nearly \$2 billion is earned in manufacturing jobs, down from \$3 billion in 2000.

In the food sector, food manufacturing generates \$84 million in personal income, while retail food workers earn \$114 million, and dining service workers earn \$231 million, of income.

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

Issues affecting low-income residents of Boulder County:

Over 55,000 residents (19%) 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 \$106 million each year buying food, and receive \$10 million of SNAP benefits (formerly known as food stamps) and \$2.5 million in WIC coupons (these benefits amount to 12% of low-income food expenditures). The county's 736 farmers receive an average of \$541,000 in subsidies (13-year average, 1994-2006), mostly to raise crops such as wheat and corn that are sold as commodities, not to feed county residents. *Data from Federal Census of 2000, Bureau of Labor Statistics, & Bureau of Economic Analysis.*

7,549 households (about 19,000 residents) earn less than \$10,000 per year. *Source: Federal Census of 2000.*

16% of all adults aged 18-64 in the Denver Metro region have no health insurance. *Source: Centers for Disease Control.*

Boulder Community Hospital estimated it would spend \$42 million on unreimbursed health care costs in 2005. [Source: Alicia Wallace, *The Daily Camera*, Nov. 16, 2005].

Food-related health conditions:

30% of Boulder County residents reported in 2007 that they eat five or more servings of fruit or vegetables each day. 70% do not. 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.*

57% of county residents report they have at least 20 minutes of physical activity three or more days per week. *Source: Centers for Disease Control.*

2.2% of Boulder County residents have been diagnosed with diabetes, compared to 5% for the Denver Metro region. *Source: Centers for Disease Control.*

49% of county residents are overweight (35%) or obese (14%). Medical costs for treating these conditions in Colorado are estimated at \$874 million per year. *Source: Centers for Disease Control.*

Food-related conditions for Metro Denver covered in the Big Cities Health Inventory (2007); trends from 1990 to 2004

Mortality from heart disease in the Denver metro area fell 34%. Hispanics have lower rates than average; African-Americans have higher rates than average for the Metro area.

Cancer mortality rates fell 9%. African-Americans and Hispanics have higher rates than Whites.

Mortality from diabetes increased 97%. Rates for African Americans are more than three times those of Whites; Hispanic rates are more than double that of Whites.

Infant mortality rate fell 40%.

African-American babies are twice as likely (rate=17 per 1,000) to be born underweight as Whites (9 per 1,000). Hispanic babies are slightly less likely to be underweight (8 per 1,000).

Food and Nutrition programs:

Boulder County residents received \$10 million in SNAP benefits (food coupons) in 2006, and \$2.5 million of WIC coupons in 2007.

The county's farms (Agricultural Census, 2007)

Agriculture Census data for 2007 were released February 4, 2009

Land:

- 746 farms. This is 2% of Colorado farms.
- 24 (3%) of these are 1,000 acres or more.
- 501 (67%) farms are less than 50 acres.
- The most prevalent farm size is 10-49 acres, with a total of 336 farms (45% of county).
- Average farm size is 185 acres, 22% of Colorado's average.
- The county has 137,668 acres of land in farms, an increase of 28% since 2002.
- This amounts to 0.4% of the state's farmland.
- 53% of farmland is pasture, and 40% is cropland.
- County farms have 37,363 acres of harvested cropland.
- 480 (64%) farms have a total of 33,871 acres of irrigated land — 25% of the county's farmland.

- 81 farms receive irrigation water from the U.S. Bureau of Reclamation.
- Average value of land and buildings per farm is \$588,686. This is 66% of the state average of \$892,170, and only *half* the average value of land and buildings for the county's farms in 2002.

Sales:

- \$34 million of crops and livestock sold (2007), 0.6% of state ag sales.
- This is a 3% increase in sales over 2002, though the number of acres farmed rose 28%.
- Total farm production expenses were \$39 million, for a total deficit of \$5 million in production costs. Production expenses in 2007 were 16% higher than in 2002.
- The largest single cost of production was hired labor, a total of \$8.5 million. Seed costs were next, at \$5 million.
- \$26 million of crops were sold (76% of sales), \$4 million more than 2002.
- \$8 million of livestock and products were sold (24% of sales). This is \$3 million less than in 2002, and \$7 million less than in 1997.
- The value of livestock products sold fell 47% from \$15 million in 1997 over the past decade, while the number of farms/ranches selling livestock, poultry and related products declined 19% from 357 in 1997 to 288 in 2002, and then increased to 316 in 2007.
- 513 (69%) of the county's farms sold less than \$10,000 of products in 2002. Their aggregate sales of \$1.2 million amounted to 4% of the county's farm product sales.
- 51 farms (7%) sold more than \$100,000 of products, an aggregate total of \$26.6 million, 78% of county farm product sales.
- 83 farms received \$376,000 of federal subsidies in 2007 [Note that Agriculture Census data differ from Bureau of Economic Analysis data], 43% more than in 2002.
- 63% (482) of county's farms reported net losses in 2007 even after subsidies are taken into account. This is higher than the Colorado average of 60% (22,370 of 37,054).

Nursery, Landscape and Ornamental Crops:

- 38 farms sold \$15 million of ornamental and nursery crops; this is the single most important source of farm income in the county. This represents 5% of Colorado's total sales of ornamental crops.
- 9 farms sold \$46,000 of Christmas trees, up from 4 farms selling \$6,000 five years before.

Cattle & Dairy:

- 193 ranches and farms hold an inventory of 10,771 cattle and calves.
- 5,586 cattle worth \$4.3 million were sold from 164 ranches in 2007. This represents a 6% increase in the number of farms and ranches selling cattle or calves since 2002.
- No farms were reported as selling milk or dairy products, down from 3 farms in 1997.
- 411 farms produced 78,000 dry tons of forage crops (hay, etc.).

Other livestock & animal products:

- 79 farms sold a total of \$1.6 million of horses. This means sales tripled in five years; the same number of farms sold \$532,000 of horses in 2002.
- 83 farms raise laying hens.
- 69 farms sell poultry and products, but 2007 sales were not reported by the Agriculture Census. County producers sold \$823,000 of poultry and products in 2002.
- 19 farms sold 258 hogs and pigs for a total of \$28,000. This is a decline of 39% in the number of farms, and 93% in sales, over the past decade.

- 41 farms hold an inventory of 1,343 sheep, lambs, and goats; selling \$235,000 worth. This is half of the 2002 inventory, but both the number of farms (46%) and sales (28%) increased.

Grains, Dry Edible Beans, Oil Crops, and others:

- Boulder County farms sold \$2.3 million of grains, oil crops and edible beans, up from \$41.6 million sold in 2002 .
- 18 county farms raised \$1.2 million (336,000 bushels) of corn on 2,499 acres in 2007.
- This was an average price of \$3.65 per bushel.
- In 2002, 27 county farms raised 315,000 bushels of corn on 2,652 acres, so fewer farmers now raise more corn on less land.
- 20 of the county's farmers sold 116,607 bushels of wheat, primarily winter wheat, on 4,620 acres.
- Valued at \$673,000, this is 0.1% of the state's wheat crop.
- 3 farms raise sunflower seeds.
- 14 farms produce 131,000 bushels of barley on 1,337 acres, worth \$366,000.
- 2 farms produce dry edible beans, down from 8 farms in 2002.
- 3 farms produce sugar beets, down from 8 farms in 2002.

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

- Total vegetable and potato sales were \$1.98 million (0.7% of Colorado's), essentially the same as in 2002.
- 46 farms produce these vegetables on 520 acres of land; there were only 30 vegetable farms in 2002.
- This is 0.5% of Colorado's vegetable acreage.
- 14 farms raise 7 acres of potatoes.

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

- The county has 28 fruit farms with 36 acres of orchard, compared to 11 fruit farms and 22 acres of orchards in 2002.
- 32 farms sold \$163,000 of fruit and nuts, three times 2002 sales, and four times the number of farms. Boulder County has 4% of Colorado's fruit farms.

Direct and organic sales:

- 105 farms sell \$715,000 of food directly to consumers. This is a 31% increase in the number of farms selling direct (80 in 2002), and a 31% decrease in direct sales, from \$952,000 in 2002. Direct sales account for 2% of county farm sales, four times the national average.
- Boulder County farmers make 4% of the state's direct sales (down from 5% in 2002, and 7% in 1997).
- Ten county farms reported \$260,000 of income from agri-tourism, up from \$16,000 in 2002.
- 30 county farms sold organic foods (\$809,000 sales) from 730 acres.
- This is 9% of Colorado farms selling organic, but only 1.6% of state sales (\$50.6 million).
- 10 farms market through community supported agriculture (CSA).
- 36 farms produce added-value products on the farm.

Conservation practices:

- 165 farms use rotational management or intensive grazing.
- 128 farms use conservation practices.
- 31 farms generate some electricity on the farm.

Other Boulder County highlights (Agriculture Census 2007):

- Ranks 5th in Colorado for inventory of laying hens.
- Ranks 6th in state for sales of ornamental and nursery crops, with \$15 million of sales.
- Ranks 6th in state for sales of horses, with \$1.6 million of sales.
- Ranks 9th in Colorado for fruit and nut production, with \$163,000 in sales.
- Farmers sell \$6.4 million of forage crops, up from \$3.6 million in 2002.
- Poultry sales were not reported in the 2007 census. Five years ago, in 2002, Boulder County was the fifth-largest poultry seller in state, with \$823,000 in sales.
- Ranks second in duck production in Colorado, down from first in 2002.
- Sales of cattle and calves totaled \$4.3 million.
- Sales of dairy products have been suppressed to protect confidentiality.

Colorado highlights (Agriculture Census 2007):

- Ranks 1st in nation for acreage devoted to proso millet (259,000 acres).
- Ranks 2nd in U.S. for sales of sheep and goats (\$85 million).
- Ranks 5th in nation for sales of cattle and calves (\$3.2 billion).
- Ranks 7th in U.S. for acreage devoted to wheat (2.3 million acres).
- Ranks 7th in U.S. for acreage devoted to grain sorghum (153,000 acres).
- Colorado's 37,054 farms was 18% more farms than in 2002.
- Total sales of farm commodities totaled \$6 billion, a 34% increase over 2002.
- \$2 billion of farm sales came from selling crops.
- \$4 billion of farm sales came from selling livestock and products.
- Government payments rose 24% over 2002 levels, to \$156 million.
- The most prevalent farm size was 10-49 acres, with over 9,000 farms.
- The next most prevalent farm size was 50-179 acres, with 8,500.
- Third most prevalent farm size was more than 1,000 acres, with over 6,000 farms.
- 679 Colorado farms reported \$33 million of income from agri-tourism and related activities, up from \$12 million in 2002. However, 867 farms earned income from tourism in 2002.
- 2,777 state farms earned \$22.6 million selling products direct to consumers, up from \$17 million in sales in 2002.
- 425 Colorado farms devoted 102,936 acres to organic production. This included 49,000 acres of harvested cropland, 41,000 of pastureland, and 19,538 acres undergoing organic conversion.
- 347 of these organic farms sold \$50.6 million of organic products, including \$19 million of crops (this may include ornamental and greenhouse crops).
- 214 Colorado farms market through community supported agriculture (CSA).
- 1,709 state farms produce value-added products.
- 7,043 farms use conservation methods.
- 8,511 farms practice rotational management or intensive grazing.
- 969 Colorado farms generate energy or electricity on the farm.

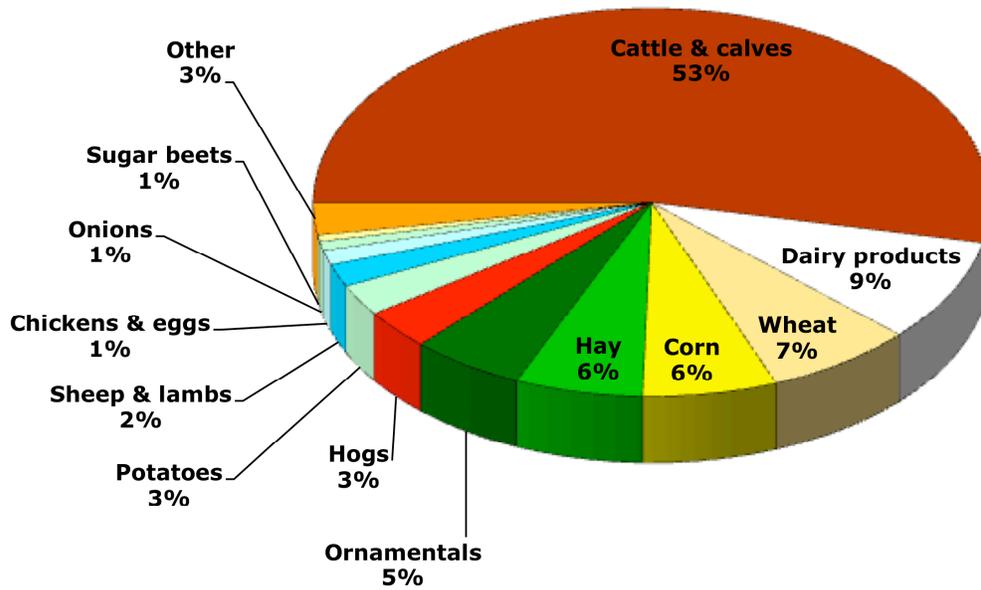
Colorado's top 25 farm products in 2007 (Economic Research Service)

See chart on next page

	\$ millions
1 Cattle & calves	3,174.9
2 Dairy products	515.5
3 Wheat	418.6
4 Corn	382.5
5 Hay	362.6
6 Ornamentals	322.0
7 Hogs	198.5
8 Potatoes	156.2
9 Sheep & lambs	112.6
10 Chickens & eggs	74.1
11 Onions	46.0
12 Sugar beets	32.3
13 Millet, proso	28.9
14 Dry beans	24.3
15 Barley	20.8
16 Sunflowers	18.6
17 Sorghum grain	17.1
18 Peaches	17.1
19 Corn, sweet	15.2
20 Cabbage	11.6
21 Cantaloupes	5.1

Note: Turkeys, lettuce, mushrooms, and carrots were also listed among Colorado's top 25 products, but sales figures for these products were not released by ERS.

Colorado's Top Farm Products, 2007



Source: USDA Economic Research Service

Balance of Cash Receipts and Production Costs (Bureau of Economic Analysis):

Boulder County ranchers and farmers sell \$54 million of commodities per year (1994-2006 average), spending \$64 million to raise them, for an average loss of \$10 million each year. The farm sector as a whole has not earned a positive cash flow from raising commodities (though clearly some individual farms have made money) since 1994. Note that these sales figures compiled by the BEA are higher than cash receipts recorded by the USDA Agriculture Census (above).

Overall, farm producers have suffered a deficit of \$127 million since 1994. Moreover, 63% of the county's farms and ranches reported a net loss in 2007 (Ag Census), even after subsidies are taken into account. Farmers spent \$15 million more producing crops and livestock in 2006 than they earned from sales of those products. Livestock sales plummeted 80% from 1991 to 2006, from \$76 million to \$15 million — a loss of \$61 million of sales in 16 years.

Boulder county farmers and ranchers earned \$17 million less by selling commodities in 1969 than they earned in 2006 (in 2006 dollars). Sales of livestock and related products fell 86%, from \$105 million in 1978 to \$15 million in 2006, while crop income has risen slowly. Labor costs have increased steadily since 1987, and have been the largest single farm production cost since 1994.

Farmers and ranchers earn another \$6 million per year of farm-related income — primarily custom farm work and rental income (13-year average for 1994-2006). Federal farm support payments are relatively small, averaging \$541,000 per year for the entire county over the same years. Even taking these sources of income into account, net farm income has averaged a deficit of \$3.5 million. This means many farm families rely deeply on off-farm income.

The county's consumers:

Boulder county consumers spend \$662 million buying food each year, including \$374 million for home use. Most of this food is produced outside the county. Only \$715,000 of food products (2% of farm cash receipts, and 0.1% of local consumer needs) are sold by farmers directly to consumers.

Estimated change in net assets for all county households was a combined loss of \$361 million in 2006 alone (BLS). This places additional pressure on Boulder County residents as they pay for food.

Farm and food economy summary:

Farmers lose \$10 million each year producing food commodities, spending \$23 million buying inputs from external suppliers, for a total outflow of \$33 million from the county economy.

Meanwhile, consumers spend more than \$600 million buying food from outside. Thus, total loss to the county is \$630 million of potential wealth *each year*. This loss amounts to nearly 13 times the value of all commodities raised in the county.

Boulder County: markets for food eaten at home (2006):

Source: Bureau of Labor Statistics

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 85
Fruits & vegetables	61
Cereals and bakery products	50
Dairy products	42
“Other,” incl. sweets, fats, & oils	137

If Boulder County consumers purchased only 9% of the food they need for home use directly from county farmers, this would produce \$34 million of new farm income in Boulder County — an amount equivalent to all of the 2007 farm sales in the county.

Denver Metro area: markets for food eaten at home (2006):

Source: Bureau of Labor Statistics

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 741
Fruits & vegetables	532
Cereals and bakery products	435
Dairy products	366
“Other,” incl. sweets, fats, & oils	1,198

State of Colorado: markets for food eaten at home (2006):

Coloradans purchase at least \$9.5 billion of food per year, \$5.4 billion of this to eat at home.

Source: Bureau of Labor Statistics

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 1,224
Fruits & vegetables	879
Cereals and bakery products	718
Dairy products	605
“Other,” incl. sweets, fats, & oils	1,980

Key data sources:

Bureau of Economic Analysis data on farm production balance

<http://www.bea.doc.gov/bea/countyal/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>

Centers for Disease Control: Behavior Risk Factors Surveillance System

BRFSS <http://apps.nccd.cdc.gov/brfss-smart/>

National Association of County and City Health Officials (NACCHO)

Big Cities Health Inventory <http://www.naccho.org/>

For more information:

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

<http://www.crcworks.org/locales.html>

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>

To get a brief list of essential food facts, many of which are cited in the presentation above,

<http://www.crcworks.org/foodmarkets.pdf>

To link to further analysis of farm and food economies in the U.S.:

<http://www.crcworks.org/econ.html>

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