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Tools for Community Self-determination

Greenbrier Valley (West Virginia) Local Farm & Food Economy

Highlights of a data compilation
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**Greenbrier Valley Economic Development Corporation (GVEDC)
West Virginia Community Development Hub
West Virginia Food and Farm Coalition**

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Covers Greenbrier, Monroe & Pocahontas Counties in West Virginia

Greenbrier Valley (Bureau of Economic Analysis, 2008)

56,975 residents receive \$1.6 billion of income annually. Although income from mining and manufacturing has declined over the past 40 years, personal income still increased 125% from 1969 – 2008, after dollars were adjusted for inflation. The largest source of personal income is transfer payments (from government programs such as pensions), which account for \$497 million of personal income [see below]. Government jobs rank second, with \$230 million. Capital income (from interest, rent or dividends) brings in \$226 million of personal income. Hotel jobs are next, with \$108 million. Retail jobs rank third, with \$87 million. Manufacturing jobs produce \$76 million of personal income, and construction jobs bring in \$60 million. Note that income from public sources makes up 44% of all personal income in the region; only 37% is earned as wages and salaries.

Income earned from transfer payments includes \$188 million of retirement and disability insurance benefits; \$228 million of medical benefits; \$36 million of income maintenance benefits; \$10 million of unemployment insurance; and \$15 million of veteran's benefits.

Government income includes \$32 million of income earned by federal workers; \$54 million for state government workers, and \$134 million earned by local government staff. Military personnel earn \$12 million of personal income.

Although population has increased 10% since 1969, there has been only limited public planning to assure a secure and stable food supply.

Issues affecting low-income residents of Greenbrier Valley:

Over 22,000 residents (40%) 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 \$46 million each year buying food, including \$8 million of SNAP benefits (formerly known as food stamps) and additional WIC coupons. The region's 1,978 farmers receive an annual combined total of \$1.7 million in subsidies (40-year average, 1969-2008), mostly to raise crops such as corn or soybeans that are sold as commodities, not to feed Greenbrier Valley residents. *Data from Federal Census of 2000, Bureau of Labor Statistics, & Bureau of Economic Analysis.*

17% percent of the region's households (over 9,770 residents) earn less than \$10,000 per year. *Source: Federal Census of 2000.*

17% of all adults aged 18-64 in Metro Charleston carry no health insurance. *Source: Centers for Disease Control. Note: this data is only compiled in metro areas; Charleston was selected as the metro area closest to Greenbrier Valley.*

Food-related health conditions:

18% of Metro Charleston residents reported in 2009 that they eat five or more servings of fruit or vegetables each day. 82% 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.*

35% of Metro Charleston adults report 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. *Source: Centers for Disease Control.*

13% of Metro Charleston residents have been diagnosed with diabetes. *Source: Centers for Disease Control.* Medical costs for treating diabetes and related conditions in the metro region are estimated at \$175 million per year. Costs for the state of West Virginia as a whole total \$1 billion. *Source: American Diabetes Association cost calculator.*

70% of Metro Charleston residents are overweight (37%) or obese (33%). *Source: Centers for Disease Control.*

The region's farms (Agricultural Census, 2007)

Agriculture Census data for 2007 were released February 4, 2009

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:

- 1,978 farms. This is 8% of West Virginia farms.
- Greenbrier region had 7% more farms in 2007 than in 2002. Some of this difference may be due to better census takers making better contact with small farms.
- 65 (3%) of these are 1,000 acres or more in size.
- 497 (25%) farms are less than 50 acres.
- Average farm size is 218 acres, larger than the state average of 157 acres.

- The region has 431,732 acres of land in farms.
- This amounts to 12% of the state's farmland.
- Greenbrier region holds 68,612 acres of harvested cropland.
- 91 of these acres are irrigated.
- Average value of land and buildings per farm is \$494,986. This is larger than the state average of \$373,435.

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 \$67 million of crops and livestock in 2007.
- Farm product sales increased 19% from 2002 to 2007.
- \$3 million of crops were sold (5% of sales).
- \$64 million of livestock and products sold (95% of sales).
- 1,287 (65%) of the region's farms sold less than \$10,000 of products in 2007.
- Total sales from these small farms were \$2.2 million, 3% of the region's farm product sales.
- 107 farms (5%) sold more than \$100,000 of products.
- Total sales from these larger farms were \$43 million, 64% of the region's farm product sales.
- 55% of the region's farms (1,090 of 1,978) reported net losses in 2007. This is less than the West Virginia average of 64%.
- Greenbrier region's farmers collected a combined total of \$358,000 of federal commodity support payments in 2007.

Production Expenses:

- Feed purchases were the largest single expense for Greenbrier Valley farmers in 2007, totaling \$12 million (22% of production expenses).
- Purchases of livestock ranked as the second most important expense, at \$11 million (20%).
- Farmers charged \$7 million to depreciation (13%).
- Supplies, repairs, and maintenance costs totaled \$4.8 million for the region's farmers (9%).
- Gasoline, fuels, and oil costs totaled \$4.3 million (8%).
- Interest expenses totaled \$3.6 million (6%).
- Farmers spent \$3.6 million to hire laborers (6%).
- Chemical fertilizer costs totaled \$3.4 million (6%).

Cattle & Dairy:

- 1,175 ranches and farms hold an inventory of 75,267 cattle.
- 53,200 cattle were sold in 2007 for total sales of \$38 million.
- 43 farms have at least 1,958 milk cows. *Note that data for dairy farms in Pocahontas County were suppressed by USDA in an effort to protect confidentiality, so these totals are incomplete.*
- Sales of milk and dairy products totaled at least \$6 million. *Note that sales data for dairy farms in Pocahontas County were suppressed by USDA in an effort to protect confidentiality, so these totals are incomplete.*
- 112 farms produced 49,359 tons of corn for silage on 3,210 acres.
- 1,427 farms produced 118,777 tons of forage crops (hay, etc.) on 63,384 acres.
- 608 farms sold \$1.8 million of forage.

Other livestock & animal products:

- 87 farms hold an inventory of 466 hogs and pigs.
- 92 farms sold 1,407 hogs and pigs in 2007, worth \$152,000.
- 156 farms hold an inventory of 7,133 sheep and lambs.
- 182 farms sold \$530,000 of sheep, goats, and lambs in 2007.
- 167 farms hold an inventory of 4,543 laying hens.
- Sales of poultry and eggs totaled \$18 million, primarily from Greenbrier County.
- Two farms in Monroe County raise broiler chickens, but *data on these farms was suppressed by USDA in an effort to protect confidentiality.*
- Four farms engage in aquaculture.
- 94 farms raise horses and ponies.

Grains, oil seeds, and edible beans:

- 65 farms raised \$212,000 of grains, oil seeds, and edible beans.
- This includes 57 farms raising 132,488 bushels of corn on 1,135 acres, worth \$184,000.
- One farm raised soybeans in 2007.

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

- 48 farms worked 210 acres to sell \$441,000 of vegetables.
- This represents an 85% increase in both the number of farms (from 26) and sales of vegetables (from \$239,000) over 2002 levels.
- 30 farms raised 50 acres of potatoes.

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

- The region has 36 farms with a total of 62 acres of orchards.
- Pocahontas County fruit and nut farms sold \$9,000 of products in 2007.
- *Sales data for Greenbrier and Monroe Counties were suppressed by USDA in an effort to protect confidentiality, so these totals are incomplete.*

Nursery and Greenhouse plants

- 29 farms sold \$691,000 of nursery and ornamentals in 2007.
- This represents a decline of 17% in the number of farms (from 35) and an increase of 20% in sales (from \$578,000), over 2002.
- 11 farms raise Christmas trees.

Other crops:

- Two farms raise tobacco, both in Monroe County.
- This is a decrease of 91% in farms raising tobacco, from 23 in Greenbrier and Monroe Counties combined, in 2002.

Direct and organic sales:

- 152 farms sold \$502,000 of food directly to consumers. This is a 63% increase in the number of farms (93 in 2002) selling direct, and a 72% increase in direct sales over 2002 sales of \$292,000.
- This amounts to 0.7% of farm product sales, nearly twice the national average of 0.4%.
- Monroe County leads the region in direct sales, with \$287,000 (1.7% of farm product sales).
- 9 farms in the region sold \$15,000 of organic foods.
- For comparison, 62 farms in West Virginia sold \$260,000 of organic food products.
- 18 farms market through community supported agriculture (CSA).
- 99 farms in the region produce value-added products.

Conservation practices:

- 290 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.
- 494 farms practice rotational management or intensive grazing.
- 13 farms generate energy or electricity on the farm.

County and State Highlights

Greenbrier County highlights (Agriculture Census 2007):

- 881 farms, 13% more than in 2002.
- Greenbrier County has 176,995 acres of land in farms.
- Farmers sold \$43 million of farm products in 2007.
- \$1.7 million (4%) of these sales were crops.
- \$41 million (96%) of these sales were livestock.
- The most prevalent farm size is 50-179 acres, with 347 farms (39%) in this category.
- Next most prevalent farm size is 10-49 acres, with 226 (26%) farms.
- 32 farms (4%) are 1,000 acres or more.
- 261 (30%) of farms are less than 50 acres.
- 565 farms (64%) sold less than \$10,000 of farm products.
- 60 farms (7%) sold more than \$100,000 of farm products.
- 72 farms sold \$161,000 of food directly to consumers. This is a 60% increase in the number of farms (45 in 2002) selling direct, and a 2% decrease in direct sales from 2002 sales of \$165,000.
- Direct sales are 0.4% of farm product sales, same as the national average of 0.4%.
- Greenbrier County ranks third in West Virginia for sales of farm products.
- The county is the fourth-largest producer of livestock and related products in the state.
- Greenbrier County ranks 9th in West Virginia for crop sales.
- The county ranks first in the state for cattle and calf sales, with \$19.8 million.
- Greenbrier County ranks 1st in West Virginia for cattle and calf inventory, with 33,573.
- The county ranks 2nd in the state for acreage planted to forage crops, with 26,847.
- Greenbrier County ranks 2nd in the state for acreage of rye, with 223.
- The county is the third-ranked county in the state for turkey production, but *inventory figures were not released by USDA in order to protect confidentiality, so these totals are incomplete.*
- Greenbrier County ranks 4th in West Virginia for sheep, goat and lamb inventory, with 2,885.
- The county ranks 4th in the state for sales of sheep, goats and lambs, with \$241,000.

- The county ranks 4th in the state for sales of forage, with \$869,000.
- Greenbrier County ranks 5th in the state for sales of poultry and eggs, with \$17.7 million.
- The county is the fifth-ranked producer of horses in the state, with an inventory of 1,521.
- The county ranks 5th in acres of corn for silage, with 1,183.
- Greenbrier County farms rank 6th in the state for milk production, selling \$2.6 million.
- Greenbrier County ranks 6th in the state for sales of vegetables, with \$270,000.
- County farms rank 6th in the state for sales of hogs and pigs, with \$61,000.
- Greenbrier County ranks 8th in the state for Christmas tree sales.

Monroe County highlights (Agriculture Census 2007):

- 707 farms, 4% more than in 2002.
- Monroe County has 132,859 acres of land in farms.
- Farmers sold \$16 million of farm products in 2007.
- \$1 million (7%) of these sales were crops.
- \$15 million (93%) of these sales were livestock.
- The most prevalent farm size is 50-179 acres, with 319 farms (45%) in this category.
- Next most prevalent farm size is 10-49 acres, with 149 (24%) farms.
- 12 farms are 1,000 acres or more.
- 161 (23%) of farms are less than 50 acres.
- 461 farms (65%) sold less than \$10,000 of farm products.
- 32 farms (5%) sold more than \$100,000 of farm products.
- 46 farms sold \$287,000 of food directly to consumers. This is a 77% increase in the number of farms (26 in 2002) selling direct, and a 328% increase in direct sales over 2002 sales of \$67,000.
- Direct sales are 1.7% of farm product sales, more than four times the national average of 0.4%.
- Monroe County ranks 9th in West Virginia for sales of farm products.
- The county is the sixth-largest producer of livestock and related products in the state.
- Monroe County ranks 2nd in West Virginia for cattle and calf inventory, with 26,183.
- The county ranks 3rd in the state for cattle and calf sales, with \$11.4 million.
- Monroe County farms rank 4th in the state for milk production, selling \$3.3 million.
- The county ranks 4th in the state for turkey production, but *inventory figures were not released by USDA in order to protect confidentiality, so these totals are incomplete.*
- The county ranks 4th in acres of corn for silage, with 1,412.
- County farms rank 6th in the state for apple acreage, but *acreage figures were not released by USDA in order to protect confidentiality, so these totals are incomplete.*
- Monroe County ranks 7th in the state for sales of poultry and eggs, with \$276,000.
- The county ranks 7th in the state for acreage planted to forage crops, with 20,382.
- Monroe County ranks 8th in West Virginia for sales of grain, oilseeds, dry edible beans and peas, with \$158,000.
- The county ranks 8th in the state for tobacco sales, but *sales figures were not released by USDA in order to protect confidentiality, so these totals are incomplete.*
- The county ranks 8th in the state for inventory of sheep, goats and lambs, with 1,607.
- Monroe County is the eighth-most important producer of corn for grain in West Virginia, with 658 acres.
- The county is the 9th-ranked producer of vegetables in West Virginia, both by sales (\$155,000) and by acreage (93).

- Monroe County ranks 9th in sales of fruits and nuts, but *sales figures were not released by USDA in order to protect confidentiality, so these totals are incomplete.*
- The county ranks 9th in West Virginia for sales of hogs and pigs, with \$45,000.
- The county ranks 9th in the state for sales of sheep, goats and lambs, with \$120,000.

Pocahontas County highlights (Agriculture Census 2007):

- 390 farms, 4% more than in 2002.
- Pocahontas County has 121,878 acres of land in farms.
- Farmers sold \$8 million of farm products in 2007.
- \$497,000 (6%) of these sales were crops.
- \$7.7 million (94%) of these sales were livestock.
- The most prevalent farm size is 180-499 acres, with 129 farms (18%) in this category.
- Next most prevalent farm size is 50-179 acres, with 123 (17%) farms.
- 21 farms (3%) are 1,000 acres or more.
- 75 (19%) of farms are less than 50 acres.
- 261 farms (67%) sold less than \$10,000 of farm products.
- 15 farms (4%) sold more than \$100,000 of farm products.
- 34 farms sold \$54,000 of food directly to consumers. This is a 55% increase in the number of farms (22 in 2002) selling direct, and a 10% decrease in direct sales over 2002 sales of \$60,000.
- Direct sales are 0.7% of farm product sales, almost double the national average of 0.4%.
- Pocahontas County ranks first in West Virginia for aquaculture, but *sales figures were not released by USDA in order to protect confidentiality, so these totals are incomplete.*
- The county ranks 5th in the state for sales of sheep, goats and lambs, with \$169,000.
- The county ranks 5th in the state for inventory of sheep, goats and lambs, with 2,641.
- Pocahontas County ranks 5th in the state for the number of bee colonies, with 415.
- The county ranks 6th in West Virginia for sales of cattle and calves, with \$6.6 million.
- Pocahontas County ranks 8th in the state for sales of hogs and pigs, with \$46,000.
- The county ranks 8th in West Virginia for inventory of cattle and calves, with 15,511.
- Pocahontas County ranks 9th in the state for Christmas tree acreage, with 86.

State of West Virginia Highlights (2007 Census of Agriculture)

- 23,618 farms, 13% more than in 2002.
- West Virginia has 3.7 million acres of land in farms.
- The state ranks 43rd in the nation in farm product sales.
- Farmers sold \$591 million of farm products in 2007.
- \$78 million (13%) of these sales were crops.
- \$513 million (87%) of these sales were livestock.
- The most prevalent farm size is 50-179 acres, with 10,739 farms (45%) in this category.
- Next most prevalent farm size is 10-49 acres, with 5,749 (24%) farms.
- 334 farms (1.4%) are 1,000 acres or more.
- 6,956 (29%) of farms are less than 50 acres.
- 18,877 farms (80%) sold less than \$10,000 of farm products.
- These smaller farms sold a total of \$42 million of farm products, 7% of sales.
- 749 farms (3%) sold more than \$100,000 of farm products.
- These larger farms sold \$445 million of farm products, 75% of the state's farm sales.

- 1,990 farms sold \$7.1 million of food directly to consumers. This is a 39% increase in the number of farms (1,434 in 2002) selling direct, and a 55% increase in direct sales over 2002 sales of \$4.6 million.
- Direct sales are 1.2% of farm product sales, three times the national average of 0.4%.
- If direct food sales made up a single commodity, the value of these sales would outrank the state's 11th most important product, peaches.
- 84 farms farm organically, with a total of 783 acres of harvested cropland, and 804 acres of pastureland.
- 3,805 acres on 132 farms are undergoing organic conversion.
- 62 farms in West Virginia sold \$260,000 of organic food products, including \$222,000 of crops (this may include ornamental and greenhouse crops), \$35,000 of livestock and poultry, and \$3,000 of products from livestock and poultry (such as milk or eggs).
- 163 farms market through community supported agriculture (CSA).
- 1,011 state farms produce value-added products.
- 2,625 farms use conservation methods.
- 5,455 farms practice rotational management or intensive grazing.
- 163 farms generate energy or electricity on the farm.

West Virginia’s top farm products in 2009 (Economic Research Service)

Due to data suppression at the local level, such a chart cannot reasonably be constructed for the Greenbrier region itself. The data in the table and pie chart below are for West Virginia as a whole. See chart on next page.

	\$ millions
1 Broilers	151.2
2 Cattle and calves	132.4
3 Turkeys	46.4
4 Hay	26.7
5 Chicken eggs	25.7
6 Ornamentals	21.0
7 Dairy products	20.6
8 Apples	10.7
9 Corn	10.7
10 Soybeans	7.7
11 Peaches	3.9
12 Sheep and lambs	2.2
13 Aquaculture	1.7
14 Wheat	1.5
15 Farm chickens	1.0
16 Hogs	0.8
17 Honey	0.5
18 Wool	0.0

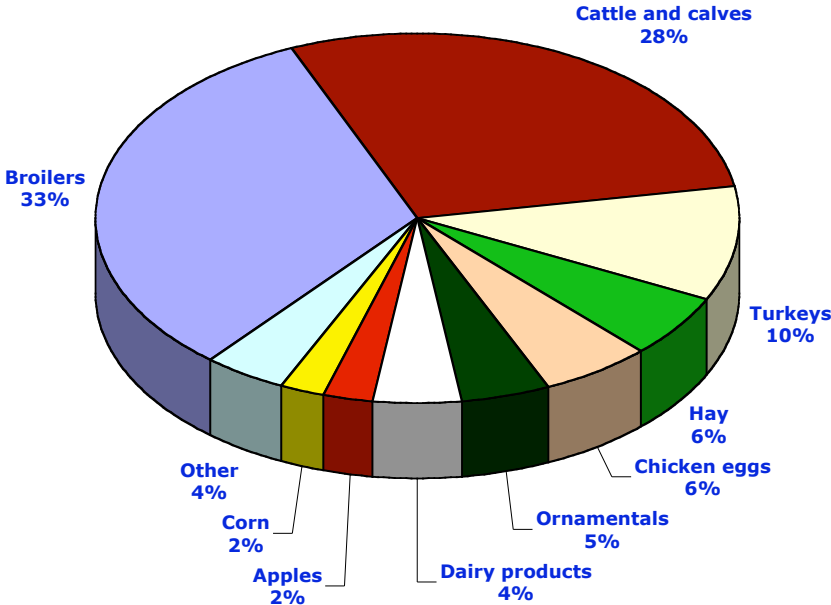
Note: mushrooms were also listed among West Virginia’s top 25 products, but sales figures for these products were not released by ERS, in an effort to protect confidentiality.

Note also that at \$7 million, direct sales from farmers to consumers amount to more than the value of the 11th-ranking product, peaches.

West Virginia's top farm products in 2009 (Economic Research Service)

See table on previous page

Top farm commodities in West Virginia, 2009



Source: USDA Economic Research Service

Balance of Cash Receipts and Production Costs (BEA):

Greenbrier Valley ranchers and farmers sell \$74 million of food commodities per year (1969-2008 average), spending \$83 million to raise them, for an average loss of \$9 million each year. *Note that these sales figures compiled by the BEA may differ from cash receipts recorded by the USDA Agriculture Census (above).*

Overall, farm producers have spent \$361 million more producing crops and livestock than they have earned by selling these commodities from 1969 to 2008. Farm production costs exceeded cash receipts for thirty-one years of that forty-year period. Moreover, 55% of the region's farms and ranches lost money in 2007 (Ag Census). Greenbrier Valley farmers and ranchers earned \$15 million less by selling commodities in 2008 than they earned in 1969 (in 2008 dollars).

Farmers and ranchers earn another \$8 million per year of farm-related income — primarily custom work, and rental income (forty-year average for 1969-2008). Federal farm support payments are relatively small, averaging \$1.7 million per year for the entire 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.

Greenbrier Valley consumers spend \$139 million buying food each year, including \$80 million for home use. Most of this food is produced outside the region. Only \$502,000 of food products (0.7% of farm cash receipts and 0.4% of the Valley consumer market) are sold by farmers directly to consumers.

Estimated change in net assets (that is, assets minus liabilities) for all region households combined was a loss of \$24 million in 2008 alone (BLS). This places additional pressure on Valley consumers trying to buy food.

Farm and food economy summary:

Farmers lose \$9 million each year producing food commodities, and spend \$28 million buying inputs sourced outside of the region, for a total loss of \$37 million to the region.

Meanwhile, consumers spend \$125 million buying food from outside. Thus, total loss to the region is \$160 million of potential wealth *each year*. This loss amounts to more than double the value of all food commodities raised in the region.

Greenbrier Valley Region: markets for food eaten at home (2008):

Greenbrier Valley residents purchase \$139 million of food each year, including \$80 million to eat at home. Home purchases break down in the following way:

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 19
Fruits & vegetables	13
Cereals and bakery products	11
Dairy products	9
“Other,” incl. Sweets, fats, & oils	28

If Greenbrier Valley residents purchased 15% of their food for home use directly from Valley farmers, this would generate \$12 million of new farm income for the Valley.

Metro Charleston: markets for food eaten at home (2008):

Metro Charleston residents purchase \$741 million of food each year, including \$423 million to eat at home. Home purchases break down in the following way:

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 102
Fruits & vegetables	70
Cereals and bakery products	57
Dairy products	48
“Other,” incl. sweets, fats, & oils	146

West Virginia: markets for food eaten at home (2008):

West Virginia residents purchase \$4.4 billion of food each year, including \$2.5 billion to eat at home. Home purchases break down in the following way:

	<i>millions</i>
Meats, poultry, fish, and eggs	\$ 612
Fruits & vegetables	421
Cereals and bakery products	343
Dairy products	285
“Other,” incl. sweets, fats, & oils	876

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/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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