Shenandoah Valley (Virginia)
Local Farm & Food Economy

Highlights of a data compilation
by Ken Meter, Crossroads Resource Center (Minneapolis) for
Virginia Cooperative Extension / Harrisonburg
July 14, 2010

Covers Augusta, Bath, Clarke, Frederick, Highland, Page, Rockbridge, Rockingham, Shenandoah, & Warren Counties in Virginia

Shenandoah Valley region (Bureau of Economic Analysis, 2008)
494,363 residents received $16.5 billion of income in 2008, more than three times the amount received in 1969, after adjusting for inflation. Population increased 1.7 times over the same period. The two largest sources of personal income are capital income (interest, rent or dividend income) and transfer payments (from government programs), which account for one-third of all income.

Issues affecting low-income residents of Shenandoah Valley:
Over 68,232 residents (22% of the 2000 population) 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 $284 million each year buying food, and receive $35 million of SNAP benefits (formerly known as food stamps) and additional millions in WIC coupons. SNAP benefits have risen steadily over the past four decades from a reported level of zero in 1969. The region’s 7,995 farmers receive a relatively small amount of federal subsidies, which have risen as high as $35 million in 2003, but fell to $6.6 million in 2008). These are mostly to raise crops such as corn or soybeans that are sold as commodities, not directly to feed county residents. Data from Federal Census of 2000, Bureau of Labor Statistics, & Bureau of Economic Analysis.

Seven percent of the region’s households (nearly 24,000 residents) earn less than $10,000 per year. Source: Federal Census of 2000.

8% of adults aged 18-64 in the metro Richmond area (the closest metro area for which data are available) report they have no health insurance. Source: Centers for Disease Control.
Food-related health conditions:

21% of Richmond metro adults (the closest metro area for which data are available) surveyed in 2008 reported that they participated in no physical activities during the previous month. Source: Centers for Disease Control.

7% of Richmond metro residents have been diagnosed with diabetes. Source: Centers for Disease Control. Medical costs for treating diabetes in the Shenandoah Valley are estimated at $285 million per year. Source: American Diabetes Association calculator.

67% of Richmond metro residents are overweight (39%) or obese (28%). Source: Centers for Disease Control.

The region’s farms (Agricultural Census, 2007)

*Land:*
- 7,995 farms. This is 17% of Virginia farms.
- 165 (2%) of these are 1,000 acres or more in size.
- 3,482 (44%) farms are less than 50 acres.
- Average farm size is 149 acres, 87% of the state average of 171 acres.
- The region has 1.2 million acres of land in farms.
- This amounts to 15% of the state's farmland.
- 5,119 acres of harvested cropland.
- 372 farms (5%) have a total of 10,661 acres of irrigated land.
- This is 13% of Virginia’s irrigated acreage.
- Average value of land and buildings per farm is $789,550. This is 110% of the state average of $720,538.

*Sales & Production Costs:*
- The region’s farmers sold $1 billion of crops and livestock (2007).
- Of this, $85 million were crop sales (8% of sales).
- Income from selling crops rose 44% from 2002 to 2007.
- $986 million of livestock and related products were sold (92% of sales).
- This amounts to 48% of all the livestock sold in Virginia.
- The number of farms selling livestock fell 5% since 2002, while sales increased 25%.
- 4,650 (58%) of the region’s farms sold less than $10,000 of products in 2007.
- Commodities sold by these smaller farms totaled 1.1% of product sales.
- 1,257 farms (16%) sold more than $100,000 of products.
- Commodities sold by these larger farms totaled 93% of product sales.
- Main expense item paid by the region’s farmers was $419 million for feeding livestock. Next largest expense was $143 million in livestock purchases. Farmers charged $63 million to depreciation, and spent $47 for supplies, repairs, and maintenance. Fuel costs ranked next, at $39 million, and farmers spent $31 million paying interest on loans.
- 1,236 farms collected nearly $5 million in federal subsidies in 2007.
- 56% of the region’s farms (4,471 of 7,995) reported net losses in 2007 — after federal subsidies are taken into account. This is better than the state average of 62%. County-by-
county, rates of net losses varied from 46% in Rockingham County to 74% in Clarke County.

Cattle & Dairy:
- 5,004 ranches and farms hold an inventory of 364,264 cattle.
- 209,839 cattle were sold by 4,408 farms for total sales of $144 million. (*Sales data from Bath County were not reported by USDA in an effort to protect confidentiality, so these figures do not show total sales.*)
- 380 farms raise at least 38,000 milk cows. *However, data from two counties (Bath & Highland) were suppressed by USDA in an effort to protect confidentiality, so these figures do not show total inventory.*
- 384 farms sold $131 million of milk and dairy products. (*Sales data for Bath & Highland counties were also suppressed.*)
- 1,949 farms sold $15 million of forage crops.
- 800 Valley farms raised 713,869 tons of corn for silage on 46,107 acres.

Other livestock & animal products:
- Poultry and egg sales totaled $693 million, from 1,231 farms. *However, sales data from Warren County were suppressed by USDA in an effort to protect confidentiality, so these figures do not show total sales.*
- 394 farms hold an inventory of at least 159 million broiler chickens. *However, data from three counties (Clarke, Highland, & Warren) were suppressed by USDA in an effort to protect confidentiality, so these figures do not show total inventory.*
- 669 farms hold an inventory of 1.5 million laying hens.
- 245 farms sold 12,299 hogs and pigs.
- Sales of horses and ponies totaled more than $4 million. *However, data from four counties (Augusta, Frederick, Page, & Warren) were suppressed by USDA in an effort to protect confidentiality, so these figures do not show total inventory.*
- 599 farms held an inventory of 23,930 sheep and lambs.
- Sheep and lamb sales totaled at least $2.2 million, although sales data from Clarke County were suppressed by USDA in an effort to protect confidentiality.

Grains, Dry Edible Beans, Oil Crops, and others:
- 761 Shenandoah Valley farms raised more than $16 million (5.6 million bushels) of corn on 50,937 acres in 2007. *However, sales data from three counties (Bath, Highland, & Warren) were suppressed by USDA in an effort to protect confidentiality, so these figures do not show total sales.*
- 240 of the region’s farms raised at least $5 million (713,755 bushels) of soybeans on 17,712 acres in 2007. *However, sales data from three counties (Bath, Rockbridge, & Warren) were suppressed by USDA in an effort to protect confidentiality, so these figures do not show total sales.*
- 116 of the region’s farmers sold 406,298 bushels of winter wheat on 6,535 acres.
- The county’s wheat crop brought a total of $1.7 million.
- 31 farms sold 13,541 bushels of oats from 241 acres.
- 200 farms produced 496,794 bushels of barley on 6,645 acres, with 169 farms selling $441,000. *However, sales data from three counties (Clarke, Frederick, & Rockbridge) were suppressed by USDA in an effort to protect confidentiality, so these figures do not show total sales.*
Vegetables & Melons (some farmers state that Ag Census data does not fully represent vegetable production):
- 204 farms sold $2.4 million of vegetables, melons, and potatoes. However, sales data from four counties (Bath, Clarke, Highland, & Page) were suppressed by USDA in an effort to protect confidentiality, so these figures do not show total sales.
- This represents an increase of 46% in the number of farms selling vegetables since 2002.
- Vegetable sales rose at least 66% from 2002 to 2007 (Note data suppression, above).

Fruits, nuts and berries (some farmers state that Ag Census data does not fully represent fruit production):
- The region has 176 fruit farms with a total of 8,235 acres of orchards.
- 212 farms sold $29 million of fruits, nuts and berries.
- This represents a 63% rise in fruit sales over 2002, on essentially the same number of farms. Note, however, that sales data from two counties (Bath in 2007 and Highland in 2002) were suppressed by USDA in an effort to protect confidentiality, so these figures do not show total sales.

Nursery, Greenhouse & Ornamental plants
- 159 farms sold $14 million of nursery, greenhouse, and ornamentals in 2007.
- This is a decline of 10% in the number of farms, and a decline of 27% in sales, since 2002.

Direct and organic sales:
- 590 farms sell $4.3 million of food directly to consumers. This is a 17% increase in the number of farms (504 in 2002) selling direct, and an 83% increase in direct sales ($2.4 million in 2002) since 2002.
- These direct sales represent 0.4% of all farm product sales, the same as the national average.
- 350 farms in the region produce value-added products.
- 52 farms are listed as Community Supported Agriculture (CSA) farms. Note that USDA tallies of CSA farms are often less complete than local counts.
- 50 of the region’s farms sold at least $1.7 million of organic foods. However, sales data from four counties (Augusta, Page, Shenandoah, & Warren) were suppressed by USDA in an effort to protect confidentiality, so these figures do not show total sales.

Conservation practices:
- 76 of the region’s farms generate electricity on the farm.
- 1,898 farms practice conservation tillage.
- 2,057 practice rotational grazing.
Key farm products sold in Shenandoah Valley (2007)

$ millions

- Poultry & eggs **693
- Cattle & calves **144
- Milk & dairy **131
- Fruits & nuts 29
- Corn for grain **16
- Forage crops 15
- Ornamentals 14
- Soybeans **5
- Horses & ponies **4
- Vegetables **2.4
- Sheep & goats **2.2
- Wheat 1.7

** Denotes data have been suppressed by USDA to protect confidentiality. Nevertheless, these totals represent $1.06 billion out of the region’s $1.07 of farm sales.

Key farm products sold in Shenandoah Valley, 2007
County Highlights (Census of Agriculture, 2007)

Augusta County
- 1,729 farms, 2% more than in 2002.
- Total land in farms was 286,195 acres, 6% less than in 2002.
- Crop sales totaled $20 million (10% of total sales).
- Livestock and related product sales totaled $175 million (90% of total sales).
- Most prevalent farm size was 10-49 acres, with 593 farms.
- Next most prevalent farm size was 50-179 acres, with 564 farms.
- 344 (20%) farms sold less than $1,000 of products.
- 249 (14%) farms sold more than $100,000 of products.
- Ranks 1st in Virginia for sales of sheep and goats, with a total of $622,000 sold.
- Ranks 1st in state for acreage devoted to forage.
- Ranks 2nd in state for value of agricultural products sold.
- Ranks 2nd in Virginia for value of livestock and products sold.
- Ranks 2nd in Virginia for value of cattle sold, with $40 million.
- Ranks 2nd in state for number of cattle and calves, with 100,808.
- Ranks 2nd in state for number of turkeys, with 1.5 million.
- Ranks 3rd in Virginia for sales of milk and dairy products, with $27.8 million.
- Ranks 3rd in state for sales of poultry and eggs, with $105 million.
- Ranks 3rd in state for acres devoted to corn for silage, with 12,020.
- Ranks 4th in state for acres devoted to corn for grain, with 17,342.
- Ranks 6th in Virginia for sales of forage crops, with $2.7 million.
- Ranks 7th in state for inventory of both broiler chickens and laying hens.

Bath County
- 120 farms, down from 124 in 2002.
- Total land in farms was 38,412 acres, 27% less than in 2002.
- Farmers sold $3.9 million of commodities in 2007.
- Crop sales totaled $1.1 million (29% of total sales).
- Livestock and related product sales totaled $2.8 million (71% of total sales).
- Top products appear to be cattle, calves, milk, and forage, but many sales figures are suppressed by USDA in an effort to protect confidentiality.
- Most prevalent farm size was 50-179 acres, with 34 farms.
- Next most prevalent farm size was 10-49 acres, with 31 farms.
- 38 (32%) farms sold less than $1,000 of products.
- 7 (5.8%) farms sold more than $100,000 of products.

Clarke County
- 496 farms, 5% more than in 2002.
- Total land in farms was 67,919 acres, 9% less than in 2002.
- Crop sales totaled $5.2 million (24% of total sales).
- Livestock and related product sales totaled $16.7 million (76% of total sales).
- Most prevalent farm size was 10-49 acres, with 200 farms.
Highlights of Shenandoah Valley Local Food Economy (Virginia) — Ken Meter, Crossroads Resource Center

• Next most prevalent farm size was 50-179 acres, with 150 farms.
• 171 (34%) farms sold less than $1,000 of products.
• 35 (7%) farms sold more than $100,000 of products.
• Clarke County farmers sold $6.9 million of cattle and calves.
• County farmers sold $5.9 million of milk and dairy products.
• Ranks 2nd in Virginia for bee colonies, with 1,156.
• Ranks 4th in state for number of horses and ponies, with 2,891.
• Ranks 5th in state for sales of horses and ponies, with $2.6 million.

Frederick County
• 676 farms, 6% less than in 2002.
• Total land in farms was 98,278 acres, 13% less than in 2002.
• Farmers sold $27.9 million of commodities in 2007.
• Crop sales totaled $19.9 million (71% of total sales).
• Livestock and related product sales totaled $8 million (29% of total sales).
• Frederick County farms sold $5.6 million of cattle and calves.
• Most prevalent farm size was 50-179 acres, with 238 farms.
• Next most prevalent farm size was 10-49 acres, with 220 farms.
• 218 (32%) farms sold less than $1,000 of products.
• 34 (5%) farms sold more than $100,000 of products.
• Ranks 1st in Virginia for sales of fruits and nuts, with $16 million sold.
• Ranks 1st in state for acreage devoted to apples, with 5,600.

Highland County
• 239 farms, 18% less than in 2002.
• Total land in farms was 76,764 acres, 20% less than in 2002.
• Farmers sold $13 million of commodities in 2007.
• Crop sales totaled $237,000 (2% of total sales).
• Livestock and related product sales totaled $12.9 million (98% of total sales).
• Highland County farms sold $6.7 million of cattle and calves.
• County farms sold $5.2 million of poultry and eggs.
• County farms sold $217,000 of forage crops.
• Most prevalent farm size was 50-179 acres, with 89 farms.
• Next most prevalent farm size was 180-499 acres, with 70 farms.
• 47 (20%) farms sold less than $1,000 of products.
• 21 (9%) farms sold more than $100,000 of products.
• Ranks 5th in Virginia for sales of sheep and goats, with $352,000 sold.
• Ranks 6th in state for inventory of turkeys, with 72,033.
• Ranks 8th in state for number of sheep and goats, with 3,220.

Page County
• 530 farms, 3% less than in 2002.
• Total land in farms was 64,387 acres, 1% more than in 2002.
• Farmers sold $148 million of commodities in 2007.
• Crop sales totaled $2 million (1% of total sales).
Livestock and related product sales totaled $146 million (99% of total sales).
Most prevalent farm size was 10-49 acres, with 196 farms.
Next most prevalent farm size was 50-179 acres, with 163 farms.
114 (22%) farms sold less than $1,000 of products.
136 (26%) farms sold more than $100,000 of products.
Page County farms sold $7.2 million of cattle and calves.
Ranks 2nd in Virginia for sales of poultry and eggs, with a total of $136 million sold.
Ranks 2nd in state for number of pullets for laying flock replacement.
Ranks 3rd in state for sales of livestock and products.
Ranks 3rd in Virginia for inventory of broiler chickens, with over 7 million.
Ranks 3rd in state for inventory of turkeys, with 902,211.
Ranks 4th in Virginia for farm product sales.
Ranks 4th in state for inventory of laying hens, with 248,956.
Ranks 8th in state for sales of horses and ponies, although sales data were suppressed by USDA in an effort to protect confidentiality.

Rockbridge County
- 805 farms, 2% more than in 2002.
- Total land in farms was 138,315 acres, 12% less than in 2002.
- Farmers sold $19.7 million of commodities in 2007.
- Crop sales totaled $3.8 million (19% of total sales).
- Livestock and related product sales totaled $15.9 million (81% of total sales).
- Rockbridge County farms sold $10.2 million of cattle and calves.
- County farms sold $3 million of milk and dairy products.
- Most prevalent farm size was 50-179 acres, with 292 farms.
- Next most prevalent farm size was 10-49 acres, with 242 farms.
- 211 (26%) farms sold less than $1,000 of products.
- 29 (4%) farms sold more than $100,000 of products.
- Ranks 8th in Virginia for sales of forage crops, with a total of $2.3 million sold.
- Ranks 9th in state for inventory of turkeys, with 53,432.

Rockingham County
- 1,970 farms, 4% less than in 2002.
- Total land in farms was 233,087 acres, 6% less than in 2002.
- Farmers sold $534 million of commodities in 2007.
- Crop sales totaled $20 million (4% of total sales).
- Livestock and related product sales totaled $514 million (96% of total sales).
- Most prevalent farm size was 50-179 acres, with 736 farms.
- Next most prevalent farm size was 10-49 acres, with 607 farms.
- 348 (18%) farms sold less than $1,000 of products.
- 623 (32%) farms sold more than $100,000 of products.
- Rockingham County holds the 4th-largest inventory of turkeys in the nation.
- The county ranks 5th in the U.S. for sales of poultry and eggs.
- Ranks 1st in Virginia for value of agricultural products sold.
- Ranks 1st in state for value of livestock and related products sold.
- Ranks 1st in Virginia for value of poultry and eggs sold, with $378 million.
• Ranks 1st in state for value of milk and dairy products sold, with $85 million.
• Ranks 1st in Virginia for value of cattle and calves sold, with $49 million.
• Ranks 1st in Virginia for acreage devoted to corn silage.
• Ranks 1st in state for inventory of broiler chickens, with 13.4 million.
• Ranks 1st in Virginia for inventory of turkeys, with over 3 million.
• Ranks 1st in Virginia for inventory of laying hens, with 1.1 million.
• Ranks 1st in state for inventory of pullets for laying flock replacement, with 415,761.
• Ranks 1st in state for inventory of cattle and calves, with 116,190.
• Ranks 2nd in Virginia for acres devoted to forage, with 52,115.
• Ranks 2nd in state for acres devoted to barley, with 2,370.
• Ranks 2nd in state for sales of sheep and goats, with $545,000.
• Ranks 3rd in Virginia for inventory of turkeys, with 435.642.
• Ranks 3rd in state for sales of fruits and nuts, with $6 million sold.
• Ranks 9th in state for inventory of cattle and calves, with 40,641.

Shenandoah County
• 1,043 farms, 5% more than in 2002.
• Total land in farms was 141,286 acres, 6% more than in 2002.
• Farmers sold $101.6 million of commodities in 2007.
• Crop sales totaled $11.3 million (11% of total sales).
• Livestock and related product sales totaled $90.3 million (89% of total sales).
• Shenandoah Valley farms sold $16 million of cattle and calves.
• Most prevalent farm size was 10-49 acres, with 399 farms.
• Next most prevalent farm size was 50-179 acres, with 339 farms.
• 239 (23%) farms sold less than $1,000 of products.
• 115 (77%) farms sold more than $100,000 of products.
• Ranks 3rd in Virginia for acres devoted to apples, but acreage was suppressed by USDA in an effort to protect confidentiality.
• Ranks 4th in state for sales of sheep and goats, with $396,000.
• Ranks 4th in state for inventory of broiler chickens, with 3.4 million.
• Ranks 4th in state for inventory of turkeys, with 435,642.
• Ranks 5th in Virginia for sales of agricultural commodities.
• Ranks 5th in state for sales of livestock and related products.
• Ranks 5th in Virginia for sales of poultry and eggs, with $66 million.
• Ranks 5th in state for inventory of pullets for laying flock replacement.
• Ranks 5th in state for sales of fruits and nuts, with $4 million.
• Ranks 7th in Virginia for acreage devoted to corn for silage.
• Ranks 8th in state for inventory of laying hens, with 58,092.
• Ranks 9th in state for sales of milk and dairy products, with $6.8 million.
• Ranks 9th in Virginia for inventory of cattle and calves, with 40,641.

Warren County
• 387 farms, 7% more than in 2002.
• Total land in farms was 47,635 acres, 3% less than in 2002.
• Farmers sold $5.6 million of commodities in 2007.
• Crop sales totaled $1.2 million (22% of total sales).
• Livestock and related product sales totaled $4.4 million (78% of total sales).
• Warren County farms sold $2.9 million of cattle and calves.
• Most prevalent farm size was 10-49 acres, with 149 farms.
• Next most prevalent farm size was 50-179 acres, with 131 farms.
• 132 (34%) farms sold less than $1,000 of products.
• 8 (2%) farms sold more than $100,000 of products.

State of Virginia highlights (Agriculture Census 2007):
• Virginia had 47,383 farms in 2007, slightly less than the 47,606 farms in 2002.
• Ranks 5th in the nation in tobacco sales, out of 17 tobacco-producing states.
• Ranks 6th in U.S. for inventory of turkeys.
• Ranks 7th in U.S. for sales of horses and ponies.
• Ranks 9th in nation for aquaculture sales.
• Ranks 30th in nation for sales of crops and livestock.
• Total sales of farm commodities totaled $2.9 billion, a 23% increase over 2002.
• $858 million of farm sales (30%) came from selling crops.
• $2.0 billion of farm sales (70%) came from selling livestock and products.
• Government payments to farmers totaled $55 million in both 2007 and 2002.
• Virginia farms covered 8.1 million acres.
• Average size of a farm was 171 acres, down 6% from 2002.
• The most prevalent farm size was 50-179 acres, with 17,500 farms.
• The next most prevalent farm size was 10-49 acres, with 15,000.
• The third most prevalent farm size was 180-499 acres, with 8,000 farms.
• 1,000 farms managed more than 1,000 acres.
• 14,738 (31%) farms sold less than $1,000 of products, by far the largest sales category.
• 3,728 (7.8%) farms sold more than $100,000 of products.
• 2,855 state farms earned $29 million selling products directly to consumers, $12 million (72%) more than in 2002, when 2,513 farms sold $17 million of products directly.
• Direct food sales from farms account for more sales than the state’s 17th-largest crop, potatoes.
• 311 farms devoted 13,502 acres to organic production. This included 6,907 acres of harvested cropland, 5,042 acres of pastureland, and 6,585 acres on 241 farms undergoing organic conversion.
• 266 of these organic farms sold $14.6 million of organic products, including $3.5 million of crops (this may include ornamental and greenhouse crops), $241,000 of livestock and poultry, and $10.9 million of products from livestock and poultry (such as milk or eggs).
• 335 farms market through community supported agriculture (CSA).
• 2,058 state farms produce value-added products.
• 10,883 farms use conservation methods.
• 11,618 farms practice rotational management or intensive grazing.
• 392 farms generate energy or electricity on the farm.
Top 25 products sold by Virginia farmers, 2008  
(Source: USDA Economic Research Service)  
(See chart on next page)

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<th>Rank</th>
<th>Product</th>
<th>$ millions</th>
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<td>Broilers</td>
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<td>2</td>
<td>Cattle and calves</td>
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<td>Dairy products</td>
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<td>Turkeys</td>
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Top 25 products sold by Virginia farmers, 2008
(Source: USDA Economic Research Service)
(See table on previous page)

Balance of Cash Receipts and Production Costs (BEA):
Shenandoah Valley Region ranchers and farmers sell $1.08 billion of food commodities per year (1978-2008 average), spending $997 million to raise them, for an average gain of $86 million each year. Note that farm expenditures compiled by the BEA are higher than those recorded by the USDA Agriculture Census (above).

Overall, farm producers have earned a surplus of $2.7 billion since 1978. Total region cash flow has been positive most years since 1978. Nevertheless, the cash return from farming has been declining since 1993, and in 2003 and 2008 farmers experienced a negative cash flow from producing crops and livestock. Moreover, 56% of the region's farms and ranches reported net losses in 2007 (Ag Census). Shenandoah Valley Region farmers and ranchers earned $116 million less by selling commodities in 2008 than they earned in 1969 (in 2008 dollars).

Farmers and ranchers earn another $41 million per year of farm-related income — primarily custom work, and rental income (thirty-one year average for 1978-2008). Federal farm support payments
are relatively small, and reporting has been inconsistent, so many data points are not available. Federal subsidies appear to have peaked at $35 million in 2003, and fell to $6.6 million in 2008.

**The region’s consumers:**
Shenandoah Valley Region consumers spend $1.2 billion buying food each year, including $691 million for home use. Most of this food is produced outside the region. Only $4.3 million of food products (0.4% of farm cash receipts) are sold by farmers directly to consumers.

Estimated change in net assets for all region households combined was a loss of $210 million in 2008 (BLS).

**Farm and food economy summary:**
Farmers gain $86 million each year producing food commodities, but spend an estimated $440 million buying inputs from external suppliers, for a total loss of $350 million to the region.

Meanwhile, consumers spend over $1 billion buying food sourced outside the region. Thus, total loss to the region is $1.3 billion of potential wealth each year. This loss amounts to more than the value of all food commodities sold in the region.

**Household Consumer Markets for food**

**Shenandoah Valley Region: markets for food eaten at home (2008):**
Shenandoah Valley purchase $1.2 billion of food for household use, including $691 million to eat at home:

<table>
<thead>
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<th></th>
<th>millions</th>
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<td>Meats, poultry, fish, and eggs</td>
<td>$ 167</td>
</tr>
<tr>
<td>Fruits &amp; vegetables</td>
<td>115</td>
</tr>
<tr>
<td>Cereals and bakery products</td>
<td>93</td>
</tr>
<tr>
<td>Dairy products</td>
<td>78</td>
</tr>
<tr>
<td>“Other,” incl. sweets, fats, &amp; oils</td>
<td>239</td>
</tr>
</tbody>
</table>

If Valley consumers purchased 15% of the food they need for home use directly from farmers, it would produce $103 million of farm income.

**Augusta County: markets for food eaten at home (2008):**
Augusta County consumers purchase $288 million of food for household use, including $164 million to eat at home:

<table>
<thead>
<tr>
<th></th>
<th>millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meats, poultry, fish, and eggs</td>
<td>$ 39.7</td>
</tr>
<tr>
<td>Fruits &amp; vegetables</td>
<td>27.3</td>
</tr>
<tr>
<td>Cereals and bakery products</td>
<td>22.2</td>
</tr>
<tr>
<td>Dairy products</td>
<td>18.5</td>
</tr>
<tr>
<td>“Other,” incl. sweets, fats, &amp; oils</td>
<td>56.8</td>
</tr>
</tbody>
</table>
Bath County: markets for food eaten at home (2008):
*Bath County consumers purchase $11 million of food for household use, including $6 million to eat at home:*

<table>
<thead>
<tr>
<th>Item</th>
<th>Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meats, poultry, fish, &amp; eggs</td>
<td>$1.5</td>
</tr>
<tr>
<td>Fruits &amp; vegetables</td>
<td>1.1</td>
</tr>
<tr>
<td>Cereals &amp; bakery products</td>
<td>0.9</td>
</tr>
<tr>
<td>Dairy products</td>
<td>0.7</td>
</tr>
<tr>
<td><em>“Other,” incl. sweets, fats, &amp; oils</em></td>
<td>2.2</td>
</tr>
</tbody>
</table>

Clarke County: markets for food eaten at home (2008):
*Clarke County consumers purchase $36 million of food for household use, including $20 million to eat at home:*

<table>
<thead>
<tr>
<th>Item</th>
<th>Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meats, poultry, fish, &amp; eggs</td>
<td>$4.9</td>
</tr>
<tr>
<td>Fruits &amp; vegetables</td>
<td>3.4</td>
</tr>
<tr>
<td>Cereals &amp; bakery products</td>
<td>2.7</td>
</tr>
<tr>
<td>Dairy products</td>
<td>2.3</td>
</tr>
<tr>
<td><em>“Other,” incl. sweets, fats, &amp; oils</em></td>
<td>7.0</td>
</tr>
</tbody>
</table>

Frederick County: markets for food eaten at home (2008):
*Frederick County consumers purchase $244 million of food for household use, including $140 million to eat at home:*

<table>
<thead>
<tr>
<th>Item</th>
<th>Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meats, poultry, fish, &amp; eggs</td>
<td>$33.7</td>
</tr>
<tr>
<td>Fruits &amp; vegetables</td>
<td>23.2</td>
</tr>
<tr>
<td>Cereals &amp; bakery products</td>
<td>15.7</td>
</tr>
<tr>
<td>Dairy products</td>
<td>18.9</td>
</tr>
<tr>
<td><em>“Other,” incl. sweets, fats, &amp; oils</em></td>
<td>48.3</td>
</tr>
</tbody>
</table>

Highland County: markets for food eaten at home (2008):
*Highland County consumers purchase $5.8 million of food for household use, including $3.3 million to eat at home:*

<table>
<thead>
<tr>
<th>Item</th>
<th>Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meats, poultry, fish, &amp; eggs</td>
<td>$0.8</td>
</tr>
<tr>
<td>Fruits &amp; vegetables</td>
<td>0.6</td>
</tr>
<tr>
<td>Cereals &amp; bakery products</td>
<td>0.4</td>
</tr>
<tr>
<td>Dairy products</td>
<td>0.4</td>
</tr>
<tr>
<td><em>“Other,” incl. sweets, fats, &amp; oils</em></td>
<td>1.1</td>
</tr>
</tbody>
</table>
### Page County: markets for food eaten at home (2008):
*Page County consumers purchase $59 million of food for household use, including $34 million to eat at home:*

<table>
<thead>
<tr>
<th>Category</th>
<th>Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meats, poultry, fish, and eggs</td>
<td>$8.1</td>
</tr>
<tr>
<td>Fruits &amp; vegetables</td>
<td>5.6</td>
</tr>
<tr>
<td>Cereals and bakery products</td>
<td>4.6</td>
</tr>
<tr>
<td>Dairy products</td>
<td>3.8</td>
</tr>
<tr>
<td>“Other,” incl. sweets, fats, &amp; oils</td>
<td>11.7</td>
</tr>
</tbody>
</table>

### Rockbridge County: markets for food eaten at home (2008):
*Rockbridge County consumers purchase $84 million of food for household use, including $48 million to eat at home:*

<table>
<thead>
<tr>
<th>Category</th>
<th>Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meats, poultry, fish, and eggs</td>
<td>$11.7</td>
</tr>
<tr>
<td>Fruits &amp; vegetables</td>
<td>8.0</td>
</tr>
<tr>
<td>Cereals and bakery products</td>
<td>6.5</td>
</tr>
<tr>
<td>Dairy products</td>
<td>5.4</td>
</tr>
<tr>
<td>“Other,” incl. sweets, fats, &amp; oils</td>
<td>16.7</td>
</tr>
</tbody>
</table>

### Rockingham County: markets for food eaten at home (2008):
*Rockingham County consumers purchase $290 million of food for household use, including $166 million to eat at home:*

<table>
<thead>
<tr>
<th>Category</th>
<th>Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meats, poultry, fish, and eggs</td>
<td>$40.0</td>
</tr>
<tr>
<td>Fruits &amp; vegetables</td>
<td>27.6</td>
</tr>
<tr>
<td>Cereals and bakery products</td>
<td>22.4</td>
</tr>
<tr>
<td>Dairy products</td>
<td>18.6</td>
</tr>
<tr>
<td>“Other,” incl. sweets, fats, &amp; oils</td>
<td>57.3</td>
</tr>
</tbody>
</table>

### Shenandoah County: markets for food eaten at home (2008):
*Shenandoah County consumers purchase $100 million of food for household use, including $57 million to eat at home:*

<table>
<thead>
<tr>
<th>Category</th>
<th>Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meats, poultry, fish, and eggs</td>
<td>$13.8</td>
</tr>
<tr>
<td>Fruits &amp; vegetables</td>
<td>9.5</td>
</tr>
<tr>
<td>Cereals and bakery products</td>
<td>7.7</td>
</tr>
<tr>
<td>Dairy products</td>
<td>6.4</td>
</tr>
<tr>
<td>“Other,” incl. sweets, fats, &amp; oils</td>
<td>19.8</td>
</tr>
</tbody>
</table>
Warren County: markets for food eaten at home (2008):
*Warren County consumers purchase $90 million of food for household use, including $51 million to eat at home:*

<table>
<thead>
<tr>
<th>Item</th>
<th>Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meats, poultry, fish, and eggs</td>
<td>$12.4</td>
</tr>
<tr>
<td>Fruits &amp; vegetables</td>
<td>8.5</td>
</tr>
<tr>
<td>Cereals and bakery products</td>
<td>6.9</td>
</tr>
<tr>
<td>Dairy products</td>
<td>5.8</td>
</tr>
<tr>
<td>“Other,” incl. sweets, fats, &amp; oils</td>
<td>17.7</td>
</tr>
</tbody>
</table>

Charlottesville Metro Area: markets for food eaten at home (2008):
*Charlottesville Metro consumers purchase $476 million of food for household use, including $272 million to eat at home:*

<table>
<thead>
<tr>
<th>Item</th>
<th>Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meats, poultry, fish, and eggs</td>
<td>$66</td>
</tr>
<tr>
<td>Fruits &amp; vegetables</td>
<td>45</td>
</tr>
<tr>
<td>Cereals and bakery products</td>
<td>37</td>
</tr>
<tr>
<td>Dairy products</td>
<td>31</td>
</tr>
<tr>
<td>“Other,” incl. sweets, fats, &amp; oils</td>
<td>94</td>
</tr>
</tbody>
</table>

State of Virginia: markets for food eaten at home (2008):
*Virginia consumers purchase $19 billion of food for household use, including $11 billion to eat at home:*

<table>
<thead>
<tr>
<th>Item</th>
<th>Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meats, poultry, fish, and eggs</td>
<td>$2,629</td>
</tr>
<tr>
<td>Fruits &amp; vegetables</td>
<td>1,808</td>
</tr>
<tr>
<td>Cereals and bakery products</td>
<td>1,472</td>
</tr>
<tr>
<td>Dairy products</td>
<td>1,222</td>
</tr>
<tr>
<td>“Other,” incl. sweets, fats, &amp; oils</td>
<td>3,764</td>
</tr>
</tbody>
</table>

Washington, DC, Metro Area: markets for food eaten at home (2008):
*Washington Metro consumers purchase $22.4 billion of food for household use, including $12.8 billion to eat at home:*

<table>
<thead>
<tr>
<th>Item</th>
<th>Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meats, poultry, fish, and eggs</td>
<td>$3,089</td>
</tr>
<tr>
<td>Fruits &amp; vegetables</td>
<td>2,126</td>
</tr>
<tr>
<td>Cereals and bakery products</td>
<td>1,730</td>
</tr>
<tr>
<td>Dairy products</td>
<td>1,436</td>
</tr>
<tr>
<td>“Other,” incl. sweets, fats, &amp; oils</td>
<td>4,423</td>
</tr>
</tbody>
</table>
One Institutional Market for Food

Compiled by Matt Benson
Community Viability Specialist, Virginia Cooperative Extension
Telephone: (540) 687-1097 E-mail: mcbenson@vt.edu
Used with permission

Counties and Cities of the Central Shenandoah Valley Region

<table>
<thead>
<tr>
<th>School Division</th>
<th>Cost of Total School Food Services*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Augusta County</td>
<td>$4,260,252</td>
</tr>
<tr>
<td>Bath County</td>
<td>526,522</td>
</tr>
<tr>
<td>Buena Vista</td>
<td>413,559</td>
</tr>
<tr>
<td>Harrisonburg</td>
<td>3,684,473</td>
</tr>
<tr>
<td>Highland County</td>
<td>169,697</td>
</tr>
<tr>
<td>Lexington</td>
<td>162,283</td>
</tr>
<tr>
<td>Rockbridge County</td>
<td>1,105,999</td>
</tr>
<tr>
<td>Rockingham County</td>
<td>4,317,141</td>
</tr>
<tr>
<td>Staunton</td>
<td>1,072,273</td>
</tr>
<tr>
<td>Waynesboro</td>
<td>1,210,195</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$16,922,394</strong></td>
</tr>
</tbody>
</table>

* Represents expenditures for providing food to students and staff, including preparing and serving meals for school-related activities and includes expenditures incurred for technology-related activities, as well as software, hardware, and infrastructure purchases [Benson].

** As a rule of thumb, national data show that an average of 42% of the total cost of food service is the actual cost of food, so total market listed here would be about $7 million [Meter].
Highlights of Shenandoah Valley Local Food Economy (Virginia) — Ken Meter, Crossroads Resource Center

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

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/?submit=rural

To read the original Finding Food in Farm Country study from Southeast Minnesota (written by Ken Meter and Jon Rosales for the Community Design Center and the Southeast Minnesota 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 link to further analysis of farm and food economies in the U.S.:
http://www.crcworks.org/?submit=farm

Contact Ken Meter at Crossroads Resource Center
<kmeter@crcworks.org>
(612) 869-8664