## Livestock

Livestock sector projections initially reflect stronger meat animal prices in 2003, largely due to very tight beef supplies, particularly of high-quality beef. Total meat production falls in 2004 in the baseline, assuming normal moisture conditions, largely because of lower beef production due to already-reduced cattle inventories and as cattle herds begin to rebuild.

In the longer run, a combination of high cattle prices and rising hog and broiler prices, gains in production efficiency, and only moderate increases in feed prices encourage growth in total meat production. Poultry use becomes a larger proportion of total meat consumption in the projections. Meat exports benefit from stronger foreign economic growth.

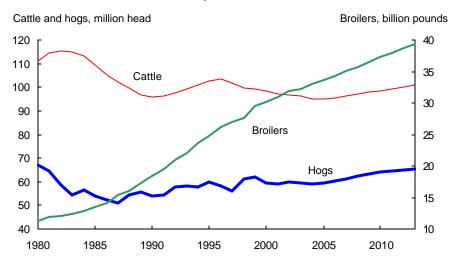
# A Note on Bovine Spongiform Encephalopathy (BSE)

Over the past few years, bovine spongiform encephalopathy (BSE) has become a major trade issue. The discovery of BSE in a single cow in Canada on May 20, 2003, resulted in a ban on imports of ruminant animals and products from Canada. Under current guidance provided by international standards set by the World Organization for Animal Health, a country would not be considered BSE free until 7 years after the last occurrence of the disease, a consideration that has been used by some countries to restrict meat imports.

On August 8, 2003, USDA announced conditions for resuming imports of certain ruminant-derived products from Canada: boneless bovine meat from cattle under 30 months of age, boneless veal from calves 36 weeks of age or younger, and boneless sheep and goat meat from animals under 12 months of age. Mexico and a few other countries have established similar guidelines. Cattle and products from cattle over 30 months of age will remain burdensome in Canada until these products can move into international trade. Additionally, a proposal was published in the *Federal Register* on November 4, 2003 by the U.S. Department of Agriculture to amend its BSE regulations to establish a new category of regions that recognizes countries or regions that present a minimal risk of introducing BSE into the United States via the importation of certain low-risk live animals and products. The proposed rule would place Canada on a list of countries considered a minimal risk for BSE, thus allowing Canada to export certain live animals and products to the United States.

The baseline projections in this report were completed prior to the diagnosis of a case of BSE in an adult Holstein cow in Washington State in December 2003. While this BSE situation is still evolving, economic impacts include early-period declines in U.S. beef exports resulting in increased supplies of beef available domestically and, consequently, lower prices for beef and cattle to move the larger quantities in the U.S. market. Farm income will also be reduced.

#### Livestock inventories and broiler production

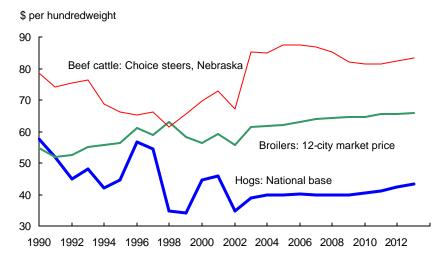


Beef production declines in the near term as producers retain cows and heifers for expansion. Cattle herds are expected to increase somewhat from cyclical lows near 95 million head in 2004-2005. Rising slaughter weights augment gradual herd expansion over the remainder of the projections. Pork production grows slowly, as the more coordinated/integrated industrial structure dampens the U.S. hog cycle. Poultry production continues to rise, but at a lower rate than during the 1980s and 1990s due to the maturity of the domestic sector and slower export growth.

The trend toward larger and more commercialized livestock systems continues throughout the baseline period; efficiency gains allow production to expand while real prices generally decline.

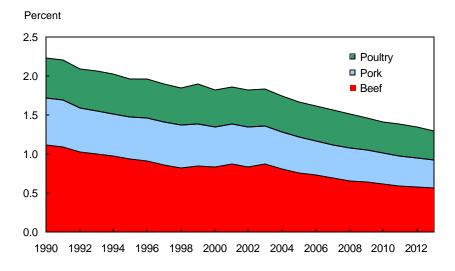
- Vertical coordination increases in the beef sector as strong demand for higher quality beef
  continues, particularly for the export and hotel and restaurant markets, but increasingly also
  at retail.
- The increase in efficiency of the U.S. hog breeding herd over the last 5 to 10 years reflects a shift to larger, more efficient operations and the decline in smaller, less efficient operations. For the baseline, the increase in efficiency slows somewhat since larger, more efficient operations (those with more than 5,000 head) now account for three-fourths of the U.S. pig crop.
- Production coordination and market integration between the United States and Canada increase in the hog sector. Feeder pigs produced in Canada are finished and processed in the United States, where feed grain prices remain favorable and processing costs are lower. Large North American retailers and hotels, restaurants, and institutions source pork cuts where prices are attractive, with demand accommodated by trade between the countries.
- The poultry sector has benefited from economies of scale associated with the industry's horizontal and vertical integration. Projected gains in efficiency over the next decade are smaller than in the past 25 years.

#### **Nominal livestock prices**



Hog and broiler prices increase moderately in response to growing domestic market demand coupled with export gains. Projected price increases are slower than the general inflation rate. Cattle prices decline in the projections from record high levels.





U.S. consumers buy more meat but use a smaller proportion of disposable income for these purchases, continuing a long-term trend. Over the next 10 years, consumer meat expenditures decline from about 1.8 percent to 1.4 percent of disposable income.

• The trend continues of poultry expenditures rising as a share of consumer spending on meats.

### Per capita meat consumption

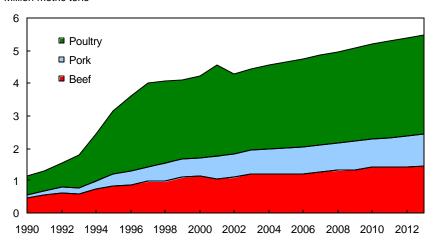
Pounds (boneless) per capita Beef Pork **Broilers** 

Total per capita meat consumption (boneless weight basis) declines from about 185 pounds in 2003 to near 181 pounds, before rising back to 185 pounds at the end of the projection period.

- Per capita consumption of relatively lower priced poultry increases throughout the baseline, allowing poultry to gain a larger share of total meat consumption and meat expenditures.
- Per capita consumption of beef initially declines, but then stabilizes later in the projections, while pork consumption varies between 48 and 50 pounds per person.

### U.S. meat exports

Million metric tons



U.S. meat exports rise throughout the baseline period, reflecting improved global economic growth and rising demand for meats. U.S. imports of beef and cattle from Canada recover from reduced levels in 2003, which followed the discovery of BSE in Canada. Baseline projections were completed prior to the diagnosis of a case of bovine spongiform encephalopathy (BSE) in an adult Holstein cow in Washington State in December 2003.

#### **Beef**

- The United States, which imports grass-fed beef from Australia and New Zealand, becomes a net beef exporter in the latter part of the projections as cattle inventories rise and exports of high-quality fed beef exceed imports of lower quality processing beef.
- The United States remains the primary source of high-quality fed beef for export, largely to Pacific Rim nations.

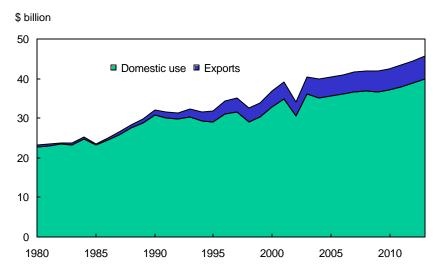
### Pork

- Pacific Rim nations and Mexico remain key markets for long-term growth of U.S. pork
  exports. Canada continues to be a strong competitor for pork trade in these markets. Brazil
  also is a major pork exporter, competing with the United States, Canada, and the EU in
  international markets.
- While increased efficiency in pork production helps limit production costs, longer term gains in U.S. pork exports will be determined by costs of production and environmental regulations relative to competitors. Such costs tend to be lower in countries with growing pork industries, such as Brazil and Mexico.

#### **Poultry**

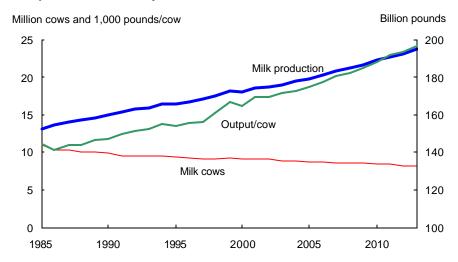
- U.S. broiler export growth is expected to slow from the rate of the 1990s. U.S. producers will face strong competition from other major broiler exporting countries, particularly Brazil and Thailand.
- Major U.S. export markets include Asia, Russia, Eastern Europe, and Mexico. Growth in U.S. poultry exports to Russia is not expected to return to the pace of the last decade, reflecting higher production in Russia, greater competition in that market, and current import quotas which are assumed to continue through early 2006.

### Farm value of domestically produced meat



While U.S. meat exports grow in importance, the domestic market remains the dominant source of demand. Meat exports account for about 11 percent of the total value of domestically produced meat in 2003, growing to more than 12 percent in the second half of the projections.

#### Milk production and dairy herd



Farm milk prices during the next several years are expected to recover from recent low levels. Growth in milk production is projected to slow through 2005/06 because of the recent low prices and the loss of payments under Milk Income Loss Contracts after the 2004/05 marketing year. Meanwhile, demand for dairy products is expected to recover from its recent slump.

- Management and productivity gains are expected to boost milk output. Further
  development of large, specialized operations in many regions will be a significant
  contributor to these gains.
- Milk per cow is projected to continue to grow, while cow numbers decline. However, the
  rates of change may well be slower than in the past as milk per cow is less easily boosted
  by simply increasing the amount of concentrate feeds fed. Also, increasing specialization
  of dairy farms over time (and the associated less attractive salvage uses for dairy capital
  and other inputs) probably has made exit from milk production more sluggish than in past
  decades.
- Domestic dairy product use grows slowly throughout the baseline period, slightly faster than the growth in population. Cheese and butter demand benefit from greater consumption of prepared foods and increased away-from-home eating. Per capita consumption of fluid milk, however, is projected to shrink slowly.
- Following the near-term price adjustments, real farm milk prices are projected to decline slowly in the long run.

| Table 21. Per capita meat consumption, retail and boneless weight |         |       |       |       |       |       |       |       |       |       |       |       |       |
|---|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Item  | Units   | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  |
|   |         |       |       |       |       |       |       |       |       |       |       |       |       |
| Retail weight:  |         |       |       |       |       |       |       |       |       |       |       |       |       |
| Total beef  | Pounds  | 67.6  | 65.5  | 62.3  | 61.1  | 60.6  | 60.0  | 59.5  | 59.2  | 59.0  | 58.9  | 58.8  | 58.7  |
| Total veal  | Pounds  | 0.6   | 0.6   | 0.6   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.4   | 0.4   | 0.4   | 0.4   |
| Total pork  | Pounds  | 51.5  | 51.4  | 51.1  | 51.3  | 51.4  | 51.8  | 52.2  | 52.5  | 52.7  | 52.6  | 52.4  | 52.3  |
| Lamb and mutton   | Pounds  | 1.2   | 1.1   | 1.1   | 1.1   | 1.1   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 0.9   |
| Total red meat  | Pounds  | 120.9 | 118.5 | 115.1 | 114.1 | 113.6 | 113.3 | 113.2 | 113.2 | 113.1 | 112.9 | 112.6 | 112.3 |
| Broilers  | Pounds  | 80.5  | 81.1  | 81.6  | 82.0  | 82.9  | 83.8  | 84.8  | 85.8  | 86.8  | 87.8  | 88.6  | 89.5  |
| Other chicken   | Pounds  | 1.4   | 1.4   | 1.4   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   |
| Turkeys   | Pounds  | 17.7  | 17.8  | 17.8  | 17.8  | 17.9  | 17.9  | 17.9  | 17.9  | 17.9  | 17.9  | 17.9  | 17.9  |
| Total poultry   | Pounds  | 99.6  | 100.2 | 100.8 | 101.4 | 102.3 | 103.2 | 104.2 | 105.2 | 106.3 | 107.2 | 108.1 | 108.9 |
| rotal poditry   | 1 ounds | 33.0  | 100.2 | 100.0 | 101.4 | 102.0 | 100.2 | 104.2 | 100.2 | 100.0 | 107.2 | 100.1 | 100.5 |
| Red meat & poultry  | Pounds  | 220.4 | 218.8 | 215.9 | 215.4 | 215.9 | 216.5 | 217.4 | 218.4 | 219.4 | 220.1 | 220.7 | 221.2 |
| Boneless weight:  |         |       |       |       |       |       |       |       |       |       |       |       |       |
| Total beef  | Pounds  | 64.0  | 62.1  | 59.0  | 57.9  | 57.4  | 56.8  | 56.4  | 56.1  | 55.9  | 55.8  | 55.7  | 55.6  |
| Total veal  | Pounds  | 0.5   | 0.5   | 0.5   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.3   | 0.3   |
| Total pork  | Pounds  | 48.4  | 48.3  | 48.0  | 48.2  | 48.3  | 48.7  | 49.1  | 49.3  | 49.5  | 49.4  | 49.2  | 49.1  |
| Lamb & mutton   | Pounds  | 0.9   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   |
| Total red meat  | Pounds  | 113.8 | 111.6 | 108.3 | 107.3 | 106.9 | 106.7 | 106.6 | 106.5 | 106.5 | 106.3 | 106.0 | 105.7 |
|   |         |       |       |       |       |       |       |       |       |       |       |       |       |
| Broilers  | Pounds  | 57.6  | 58.1  | 58.4  | 58.7  | 59.3  | 60.0  | 60.7  | 61.4  | 62.2  | 62.9  | 63.5  | 64.1  |
| Other chicken   | Pounds  | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   |
| Turkeys   | Pounds  | 14.0  | 14.0  | 14.1  | 14.1  | 14.1  | 14.1  | 14.1  | 14.2  | 14.2  | 14.2  | 14.2  | 14.2  |
| Total poultry   | Pounds  | 72.5  | 72.9  | 73.4  | 73.7  | 74.4  | 75.1  | 75.8  | 76.5  | 77.3  | 78.0  | 78.6  | 79.2  |
| Red meat and poultry  | Pounds  | 186.2 | 184.5 | 181.7 | 181.1 | 181.3 | 181.7 | 182.3 | 183.1 | 183.7 | 184.2 | 184.5 | 184.9 |

| Table 22. Consumer expenditures |        | 2002   | 2004   | 2005   | 2000   | 2007   | 2000   | 2000   | 2010   | 2011   | 2012   | 2042   |
|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Item                            | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   |
| Beef, dollars per person        | 224.50 | 245.04 | 236.12 | 236.79 | 236.89 | 234.68 | 234.88 | 235.69 | 237.44 | 240.55 | 243.39 | 246.61 |
| Percent of income               | 0.83   | 0.88   | 0.82   | 0.78   | 0.75   | 0.71   | 0.68   | 0.66   | 0.63   | 0.61   | 0.59   | 0.58   |
| Percent of meat expenditures    | 43.99  | 46.09  | 44.75  | 44.61  | 44.17  | 43.42  | 43.00  | 42.66  | 42.44  | 42.36  | 42.31  | 42.30  |
| Pork, dollars per person        | 136.93 | 136.62 | 137.00 | 137.44 | 139.37 | 141.99 | 144.61 | 147.04 | 149.44 | 151.31 | 152.98 | 154.84 |
| Percent of income               | 0.51   | 0.49   | 0.47   | 0.46   | 0.44   | 0.43   | 0.42   | 0.41   | 0.40   | 0.39   | 0.37   | 0.36   |
| Percent of meat expenditures    | 26.83  | 25.70  | 25.97  | 25.89  | 25.98  | 26.27  | 26.47  | 26.61  | 26.71  | 26.64  | 26.60  | 26.56  |
| Broilers, dollars per person    | 130.31 | 130.64 | 135.06 | 137.01 | 140.19 | 143.49 | 146.37 | 149.32 | 152.06 | 155.37 | 158.18 | 160.88 |
| Percent of income               | 0.48   | 0.47   | 0.47   | 0.45   | 0.44   | 0.44   | 0.43   | 0.41   | 0.40   | 0.40   | 0.39   | 0.38   |
| Percent of meat expenditures    | 25.53  | 24.57  | 25.60  | 25.81  | 26.14  | 26.55  | 26.79  | 27.02  | 27.18  | 27.36  | 27.50  | 27.60  |
| Turkeys, dollars per person     | 18.63  | 19.41  | 19.42  | 19.55  | 19.90  | 20.34  | 20.41  | 20.46  | 20.51  | 20.65  | 20.65  | 20.65  |
| Percent of income               | 0.07   | 0.07   | 0.07   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.05   | 0.05   | 0.05   | 0.05   |
| Percent of meat expenditures    | 3.65   | 3.65   | 3.68   | 3.68   | 3.71   | 3.76   | 3.74   | 3.70   | 3.67   | 3.64   | 3.59   | 3.54   |
| Total meat, dollars per person  | 510.37 | 531.71 | 527.60 | 530.80 | 536.35 | 540.51 | 546.28 | 552.51 | 559.45 | 567.87 | 575.20 | 582.98 |
| Percent of income               | 1.90   | 1.92   | 1.83   | 1.76   | 1.70   | 1.64   | 1.59   | 1.54   | 1.49   | 1.45   | 1.40   | 1.36   |

Table 23. Beef baseline

| Table 23. Beer baseline                 | Unite       | 2000   | 2002   | 2004   | 2005   | 2000   | 2007   | 2000   | 2000   | 2040   | 2044   | 2042    | 2042    |
|---|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|
| ltem                                    | Units       | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012    | 2013    |
| Beginning stocks                        | Mil. lbs.   | 606    | 691    | 500    | 550    | 540    | 540    | 540    | 540    | 540    | 540    | 540     | 540     |
| Commercial production                   | Mil. Ibs.   | 27,090 | 26.772 | 25,400 | 25.028 | 25.143 | 25,382 | 25,697 | 26,012 | 26.344 | 26,699 | 27.039  | 27.369  |
| Change from previous year               | Percent     | 3.8    | -1.2   | -5.1   | -1.5   | 0.5    | 0.9    | 1.2    | 1.2    | 1.3    | 1.3    | 1.3     | 1.2     |
| Griange nom provided year               | 1 0100111   | 0.0    |        | 0      | 1.0    | 0.0    | 0.0    |        |        |        |        |         |         |
| Farm production                         | Mil. lbs.   | 102    | 105    | 105    | 106    | 106    | 106    | 106    | 106    | 106    | 106    | 106     | 106     |
| Total production                        | Mil. lbs.   | 27,192 | 26,877 | 25,505 | 25,134 | 25,249 | 25,488 | 25,803 | 26,118 | 26,450 | 26,805 | 27,145  | 27,475  |
| Imports                                 | Mil. lbs.   | 3,218  | 2,851  | 3,430  | 3,500  | 3,500  | 3,300  | 3,100  | 3,000  | 2,900  | 2,800  | 2,700   | 2,600   |
| Total supply                            | Mil. lbs.   | 31,016 | 30,419 | 29,435 | 29,184 | 29,289 | 29,328 | 29,443 | 29,658 | 29,890 | 30,145 | 30,385  | 30,615  |
| Exports                                 | Mil. lbs.   | 2,447  | 2,628  | 2,660  | 2,675  | 2,725  | 2,800  | 2,875  | 2,975  | 3,075  | 3,125  | 3,175   | 3,250   |
| Ending stocks                           | Mil. Ibs.   | 691    | 500    | 550    | 540    | 540    | 540    | 540    | 540    | 540    | 540    | 540     | 540     |
|   |             |        |        |        |        |        |        |        |        |        |        |         |         |
| Total consumption                       | Mil. lbs.   | 27,878 | 27,291 | 26,225 | 25,969 | 26,024 | 25,988 | 26,028 | 26,143 | 26,275 | 26,480 | 26,670  | 26,825  |
| Per capita, carcass weight              | Pounds      | 96.6   | 93.6   | 89.0   | 87.3   | 86.6   | 85.7   | 85.0   | 84.6   | 84.3   | 84.2   | 84.0    | 83.8    |
| Per capita, retail weight               | Pounds      | 67.6   | 65.5   | 62.3   | 61.1   | 60.6   | 60.0   | 59.5   | 59.2   | 59.0   | 58.9   | 58.8    | 58.7    |
| Change from previous year               | Percent     | 2.1    | -3.1   | -4.9   | -1.9   | -0.8   | -1.0   | -0.8   | -0.5   | -0.4   | -0.1   | -0.2    | -0.2    |
| Prices:                                 |             |        |        |        |        |        |        |        |        |        |        |         |         |
| Beef cattle, farm                       | \$/cwt      | 66.61  | 81.78  | 81.54  | 83.76  | 83.89  | 83.19  | 81.66  | 78.83  | 78.12  | 78.23  | 79.05   | 80.02   |
| Calves, farm                            | \$/cwt      | 97.56  | 104.22 | 108.67 | 110.15 | 110.37 | 110.77 | 106.89 | 103.24 | 101.85 | 102.42 | 103.62  | 104.65  |
| Choice steers, Nebraska                 | \$/cwt      | 67.04  | 85.10  | 85.00  | 87.32  | 87.45  | 86.72  | 85.12  | 82.17  | 81.43  | 81.55  | 82.40   | 83.42   |
| Deflated price                          | \$/cwt      | 37.27  | 46.25  | 45.42  | 45.61  | 44.57  | 43.12  | 41.29  | 38.89  | 37.60  | 36.73  | 36.21   | 35.77   |
| Yearling steers, Okla. City             | \$/cwt      | 80.04  | 89.19  | 92.50  | 93.76  | 93.95  | 94.28  | 90.99  | 87.88  | 86.69  | 87.18  | 88.20   | 89.08   |
| Deflated price                          | \$/cwt      | 44.50  | 48.47  | 49.43  | 48.98  | 47.88  | 46.88  | 44.14  | 41.59  | 40.03  | 39.27  | 38.76   | 38.19   |
| Retail: Beef and veal                   | 1982-84=100 | 160.6  | 175.0  | 178.0  | 182.0  | 183.5  | 183.7  | 185.4  | 186.9  | 189.0  | 191.7  | 194.4   | 197.4   |
| Retail: Other meats                     | 1982-84=100 | 161.9  | 165.5  | 166.0  | 167.9  | 170.5  | 173.0  | 175.5  | 178.1  | 180.8  | 183.7  | 186.6   | 189.5   |
| ERS retail beef                         | \$/lb.      | 3.32   | 3.74   | 3.79   | 3.87   | 3.91   | 3.91   | 3.95   | 3.98   | 4.02   | 4.08   | 4.14    | 4.20    |
| Costs and returns, cow-calf enterprise: |             |        |        |        |        |        |        |        |        |        |        |         |         |
| Variable expenses                       | \$/cow      | 209.83 | 216.17 | 219.26 | 219.31 | 222.01 | 227.52 | 233.46 | 238.48 | 243.47 | 249.54 | 253.25  | 257.86  |
| Fixed expenses                          | \$/cow      | 120.58 | 122.25 | 124.89 | 130.62 | 137.15 | 139.95 | 142.70 | 145.77 | 148.73 | 151.87 | 155.04  | 158.73  |
| Total cash expenses                     | \$/cow      | 330.41 | 338.42 | 344.15 | 349.94 | 359.16 | 367.47 | 376.16 | 384.25 | 392.20 | 401.41 | 408.28  | 416.59  |
| Returns above cash costs                | \$/cow      | 40.84  | 82.82  | 93.01  | 94.17  | 88.33  | 82.50  | 59.75  | 38.17  | 28.97  | 25.91  | 27.71   | 26.74   |
| O who is a second                       | 1 000 1     | 00.70: | 00.400 | 05.406 | 05.400 | 05 506 | 00.400 | 07.000 | 07.000 | 00.405 | 00.400 | 100 100 | 100 70: |
| Cattle inventory                        | 1,000 head  | 96,704 | 96,106 | 95,133 | 95,100 | 95,598 | 96,183 | 97,090 | 97,869 | 98,436 | 99,429 | 100,130 | 100,791 |
| Beef cow inventory                      | 1,000 head  | 33,118 | 32,947 | 32,775 | 32,650 | 33,229 | 33,522 | 33,861 | 34,162 | 34,291 | 34,389 | 34,503  | 34,821  |
| Total cow inventory                     | 1,000 head  | 42,229 | 42,099 | 41,790 | 41,575 | 42,059 | 42,282 | 42,556 | 42,797 | 42,866 | 42,904 | 42,963  | 43,231  |

Projections were completed prior to the diagnosis of a case of BSE in an adult Holstein cow in Washington State in December 2003.

| Table | 2/ | Pork | haca | line |
|-------|----|------|------|------|
|       |    |      |      |      |

| Item                                    | Units       | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   |
|---|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Beginning stocks                        | Mil. lbs.   | 536    | 533    | 540    | 540    | 540    | 540    | 540    | 540    | 540    | 540    | 540    | 540    |
| Commercial production                   | Mil. lbs.   | 19,664 | 19.719 | 19,725 | 19,987 | 20.229 | 20.599 | 20,976 | 21,295 | 21,556 | 21,727 | 21,872 | 22,018 |
| Change from previous year               | Percent     | 2.7    | 0.3    | 0.0    | 1.3    | 1.2    | 1.8    | 1.8    | 1.5    | 1.2    | 0.8    | 0.7    | 0.7    |
| , |             |        |        |        |        |        |        |        |        |        |        |        |        |
| Farm production                         | Mil. lbs.   | 21     | 22     | 22     | 22     | 22     | 22     | 22     | 22     | 22     | 22     | 22     | 22     |
| Total production                        | Mil. lbs.   | 19,685 | 19,741 | 19,747 | 20,009 | 20,251 | 20,621 | 20,998 | 21,317 | 21,578 | 21,749 | 21,894 | 22,040 |
| Imports                                 | Mil. lbs.   | 1,070  | 1,250  | 1,375  | 1,430  | 1,455  | 1,480  | 1,505  | 1,535  | 1,570  | 1,600  | 1,630  | 1,665  |
| Total supply                            | Mil. lbs.   | 21,291 | 21,524 | 21,662 | 21,979 | 22,246 | 22,641 | 23,043 | 23,392 | 23,688 | 23,889 | 24,064 | 24,245 |
| Exports                                 | Mil. lbs.   | 1,611  | 1,681  | 1,715  | 1,755  | 1,800  | 1,845  | 1,890  | 1,940  | 1,985  | 2,035  | 2,090  | 2,140  |
| Ending stocks                           | Mil. lbs.   | 533    | 540    | 540    | 540    | 540    | 540    | 540    | 540    | 540    | 540    | 540    | 540    |
| Total consumption                       | Mil. lbs.   | 19,147 | 19,303 | 19,407 | 19,684 | 19,906 | 20,256 | 20,613 | 20,912 | 21,163 | 21,314 | 21,434 | 21,565 |
| Per capita, carcass weight              | Pounds      | 66.3   | 66.2   | 65.9   | 66.2   | 66.3   | 66.8   | 67.3   | 67.7   | 67.9   | 67.8   | 67.5   | 67.4   |
| Per capita, retail weight               | Pounds      | 51.5   | 51.4   | 51.1   | 51.3   | 51.4   | 51.8   | 52.2   | 52.5   | 52.7   | 52.6   | 52.4   | 52.3   |
| Change from previous year               | Percent     | 2.4    | -0.2   | -0.5   | 0.4    | 0.1    | 8.0    | 8.0    | 0.5    | 0.3    | -0.2   | -0.3   | -0.3   |
| Prices:                                 |             |        |        |        |        |        |        |        |        |        |        |        |        |
| Hogs, farm                              | \$/cwt      | 33.28  | 37.02  | 38.00  | 37.76  | 38.14  | 37.94  | 37.76  | 37.78  | 38.31  | 39.10  | 40.14  | 41.23  |
| National base, live equivalent          | \$/cwt      | 34.92  | 38.98  | 40.00  | 39.75  | 40.15  | 39.94  | 39.74  | 39.77  | 40.33  | 41.15  | 42.25  | 43.41  |
| Deflated price                          | \$/cwt      | 19.42  | 21.19  | 21.43  | 20.95  | 20.59  | 19.98  | 19.40  | 18.94  | 18.74  | 18.65  | 18.68  | 18.72  |
| Retail: pork                            | 1982-84=100 | 161.8  | 164.8  | 166.2  | 166.1  | 168.2  | 170.0  | 171.7  | 173.7  | 176.0  | 178.5  | 181.1  | 183.7  |
| ERS retail pork                         | \$/lb.      | 2.66   | 2.66   | 2.68   | 2.68   | 2.71   | 2.74   | 2.77   | 2.80   | 2.84   | 2.88   | 2.92   | 2.96   |
| Costs and returns, farrow to finish:    |             |        |        |        |        |        |        |        |        |        |        |        |        |
| Variable expenses                       | \$/cwt      | 28.08  | 30.88  | 31.26  | 29.54  | 28.89  | 29.23  | 29.95  | 30.56  | 31.13  | 32.01  | 32.13  | 32.41  |
| Fixed expenses                          | \$/cwt      | 4.88   | 4.90   | 4.92   | 4.95   | 4.97   | 5.00   | 5.02   | 5.05   | 5.07   | 5.10   | 5.13   | 5.15   |
| Total cash expenses                     | \$/cwt      | 32.95  | 35.78  | 36.18  | 34.49  | 33.87  | 34.23  | 34.98  | 35.61  | 36.20  | 37.11  | 37.26  | 37.56  |
| Returns above cash costs                | \$/cwt      | 1.97   | 3.20   | 3.82   | 5.26   | 6.28   | 5.71   | 4.77   | 4.17   | 4.13   | 4.05   | 4.99   | 5.84   |
| Hog inventory,                          |             |        |        |        |        |        |        |        |        |        |        |        |        |
| Dec. 1, previous year                   | 1,000 head  | 59,804 | 59,513 | 58,900 | 59,633 | 60,309 | 61,344 | 62,399 | 63,291 | 64,021 | 64,501 | 64,906 | 65,314 |

Table 25. Young chicken baseline

| Item                           | Units     | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   |
|--------------------------------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 5                              |           | 740    | =00    |        |        | 0.50   | 050    |        | 0.50   |        | 0.50   |        | 0.50   |
| Beginning stocks               | Mil. Ibs. | 712    | 763    | 625    | 650    | 650    | 650    | 650    | 650    | 650    | 650    | 650    | 650    |
| Federally inspected slaughter  | Mil. Ibs. | 32,240 | 32,634 | 33,450 | 33,969 | 34,648 | 35,387 | 36,128 | 36,922 | 37,673 | 38,386 | 39,081 | 39,755 |
| Change from previous year      | Percent   | 3.1    | 1.2    | 2.5    | 1.6    | 2.0    | 2.1    | 2.1    | 2.2    | 2.0    | 1.9    | 1.8    | 1.7    |
| Production                     | Mil. lbs. | 31,895 | 32,285 | 33,092 | 33,606 | 34,278 | 35,008 | 35,742 | 36,527 | 37,270 | 37,976 | 38,663 | 39,330 |
| Total supply                   | Mil. lbs. | 32,619 | 33,060 | 33,729 | 34,268 | 34,940 | 35,670 | 36,404 | 37,189 | 37,932 | 38,638 | 39,325 | 39,992 |
| Change from previous year      | Percent   | 2.7    | 1.4    | 2.0    | 1.6    | 2.0    | 2.1    | 2.1    | 2.2    | 2.0    | 1.9    | 1.8    | 1.7    |
| Exports                        | Mil. lbs. | 4,807  | 4,916  | 5,100  | 5,200  | 5,310  | 5,425  | 5,540  | 5,660  | 5,750  | 5,840  | 5,920  | 6,000  |
| Ending stocks                  | Mil. lbs. | 763    | 625    | 650    | 650    | 650    | 650    | 650    | 650    | 650    | 650    | 650    | 650    |
| Consumption                    | Mil. Ibs. | 27,049 | 27,519 | 27,979 | 28,417 | 28,980 | 29,595 | 30,213 | 30,879 | 31,532 | 32,148 | 32,755 | 33,342 |
| Per capita, carcass weight     | Pounds    | 93.7   | 94.4   | 95.0   | 95.5   | 96.5   | 97.6   | 98.7   | 99.9   | 101.1  | 102.2  | 103.2  | 104.2  |
| Per capita, retail weight      | Pounds    | 80.5   | 81.1   | 81.6   | 82.0   | 82.9   | 83.8   | 84.8   | 85.8   | 86.8   | 87.8   | 88.6   | 89.5   |
| Change from previous year      | Percent   | 5.0    | 0.7    | 0.6    | 0.5    | 1.0    | 1.1    | 1.1    | 1.2    | 1.2    | 1.1    | 1.0    | 1.0    |
| Prices:                        |           |        |        |        |        |        |        |        |        |        |        |        |        |
| Broilers, farm                 | Cents/lb. | 29.8   | 34.6   | 34.8   | 34.8   | 35.3   | 35.8   | 36.0   | 36.2   | 36.2   | 36.6   | 36.8   | 36.9   |
| 12-city market price           | Cents/lb. | 55.6   | 61.3   | 61.8   | 62.1   | 63.0   | 64.0   | 64.3   | 64.6   | 64.6   | 65.4   | 65.7   | 65.9   |
| Deflated wholesale price       | Cents/lb. | 30.9   | 33.3   | 33.0   | 32.5   | 32.1   | 31.8   | 31.2   | 30.6   | 29.8   | 29.4   | 28.9   | 28.3   |
| Change from previous year      | Percent   | -7.4   | 7.8    | -0.9   | -1.7   | -1.0   | -1.0   | -1.8   | -2.1   | -2.4   | -1.3   | -1.9   | -2.1   |
| Composite retail broiler price | Cents/lb. | 161.9  | 161.1  | 165.5  | 167.0  | 169.1  | 171.2  | 172.6  | 174.0  | 175.1  | 177.0  | 178.4  | 179.7  |
| Costs and returns:             |           |        |        |        |        |        |        |        |        |        |        |        |        |
| Total costs                    | Cents/lb. | 46.29  | 51.85  | 53.62  | 52.10  | 51.71  | 52.86  | 54.62  | 55.96  | 57.24  | 59.01  | 59.60  | 60.20  |
| Net returns                    | Cents/lb. | 9.31   | 9.45   | 8.18   | 10.02  | 11.31  | 11.09  | 9.72   | 8.64   | 7.35   | 6.36   | 6.14   | 5.74   |

| Table 26. Turkey baseline     |             |       |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Item                          | Units       | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  |
|                               |             |       |       |       |       |       |       |       |       |       |       |       |       |
| Beginning stocks              | Mil. lbs.   | 241   | 333   | 325   | 325   | 325   | 325   | 325   | 325   | 325   | 325   | 325   | 325   |
| Federally inspected slaughter | Mil. lbs.   | 5,713 | 5,697 | 5,790 | 5,884 | 5,954 | 6,021 | 6,096 | 6,164 | 6,227 | 6,287 | 6,345 | 6,404 |
| Change from previous year     | Percent     | 2.7   | -0.3  | 1.6   | 1.6   | 1.2   | 1.1   | 1.3   | 1.1   | 1.0   | 1.0   | 0.9   | 0.9   |
| Production                    | Mil. lbs.   | 5,638 | 5,622 | 5,714 | 5,807 | 5,876 | 5,942 | 6,016 | 6,083 | 6,145 | 6,205 | 6,262 | 6,320 |
| Total supply                  | Mil. lbs.   | 5,879 | 5,956 | 6,040 | 6,133 | 6,202 | 6,268 | 6,342 | 6,409 | 6,471 | 6,531 | 6,588 | 6,646 |
| Change from previous year     | Percent     | 2.6   | 1.3   | 1.4   | 1.5   | 1.1   | 1.1   | 1.2   | 1.1   | 1.0   | 0.9   | 0.9   | 0.9   |
| Exports                       | Mil. lbs.   | 439   | 452   | 465   | 500   | 511   | 524   | 535   | 544   | 553   | 559   | 568   | 580   |
| Ending stocks                 | Mil. lbs.   | 333   | 325   | 325   | 325   | 325   | 325   | 325   | 325   | 325   | 325   | 325   | 325   |
| Consumption                   | Mil. lbs.   | 5,107 | 5,179 | 5,250 | 5,308 | 5,366 | 5,419 | 5,482 | 5,540 | 5,594 | 5,647 | 5,695 | 5,741 |
| Per capita                    | Pounds      | 17.7  | 17.8  | 17.8  | 17.8  | 17.9  | 17.9  | 17.9  | 17.9  | 17.9  | 17.9  | 17.9  | 17.9  |
| Change from previous year     | Percent     | 1.0   | 0.4   | 0.4   | 0.1   | 0.1   | 0.0   | 0.2   | 0.1   | 0.1   | 0.1   | 0.0   | -0.1  |
| Prices:                       |             |       |       |       |       |       |       |       |       |       |       |       |       |
| Turkey, farm                  | Cents/lb.   | 36.5  | 35.1  | 36.0  | 36.3  | 36.9  | 37.7  | 37.7  | 37.8  | 37.9  | 38.1  | 38.1  | 38.1  |
| Hen turkey (whsle.) East      | Cents/lb.   | 64.5  | 61.7  | 63.3  | 63.6  | 64.7  | 66.1  | 66.2  | 66.3  | 66.4  | 66.8  | 66.8  | 66.9  |
| Deflated hen turkey           | Cents/lb.   | 35.9  | 33.5  | 33.8  | 33.2  | 33.0  | 32.9  | 32.1  | 31.4  | 30.7  | 30.1  | 29.4  | 28.7  |
| Retail frozen turkey          | Cents/lb.   | 105.3 | 109.3 | 109.0 | 109.6 | 111.4 | 113.9 | 114.0 | 114.1 | 114.4 | 115.0 | 115.1 | 115.2 |
| Retail: poultry               | 1982-84=100 | 167.0 | 168.7 | 174.0 | 175.3 | 177.6 | 180.1 | 181.4 | 182.6 | 183.6 | 185.4 | 186.6 | 187.7 |
| Costs and returns:            |             |       |       |       |       |       |       |       |       |       |       |       |       |
| Total costs                   | Cents/lb.   | 58.01 | 60.89 | 61.53 | 60.63 | 60.23 | 60.62 | 61.32 | 61.78 | 62.21 | 62.87 | 62.94 | 63.00 |
| Net returns                   | Cents/lb.   | 6.49  | 0.81  | 1.77  | 3.01  | 4.49  | 5.51  | 4.89  | 4.50  | 4.20  | 3.94  | 3.89  | 3.87  |

| ltem                      | Units       | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  |
|---------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Beginning stocks          | Mil. doz.   | 10    | 10    | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12    |
| Production                | Mil. doz.   | 7,221 | 7,203 | 7,260 | 7,383 | 7,494 | 7,584 | 7,675 | 7,760 | 7,845 | 7,931 | 8,018 | 8,099 |
| Change from previous year | Percent     | 0.9   | -0.2  | 0.8   | 1.7   | 1.5   | 1.2   | 1.2   | 1.1   | 1.1   | 1.1   | 1.1   | 1.0   |
| Imports                   | Mil. doz.   | 15    | 13    | 12    | 10    | 10    | 10    | 10    | 10    | 10    | 10    | 10    | 10    |
| Total supply              | Mil. doz.   | 7,246 | 7,227 | 7,284 | 7,405 | 7,516 | 7,606 | 7,697 | 7,782 | 7,867 | 7,953 | 8,040 | 8,121 |
| Change from previous year | Percent     | 1.0   | -0.3  | 0.8   | 1.7   | 1.5   | 1.2   | 1.2   | 1.1   | 1.1   | 1.1   | 1.1   | 1.0   |
| Hatching use              | Mil. doz.   | 961   | 957   | 980   | 993   | 1,008 | 1,023 | 1,039 | 1,055 | 1,070 | 1,084 | 1,097 | 1,111 |
| Exports                   | Mil. doz.   | 174   | 155   | 173   | 175   | 178   | 182   | 186   | 190   | 193   | 197   | 201   | 205   |
| Ending stocks             | Mil. doz.   | 10    | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12    |
| Consumption               | Mil. doz.   | 6,101 | 6,103 | 6,119 | 6,225 | 6,318 | 6,389 | 6,460 | 6,525 | 6,592 | 6,660 | 6,730 | 6,793 |
| Per capita                | Number      | 253.6 | 251.1 | 249.2 | 251.1 | 252.3 | 252.7 | 253.2 | 253.4 | 253.7 | 254.1 | 254.5 | 254.6 |
| Change from previous year | Percent     | 0.4   | -1.0  | -0.7  | 0.7   | 0.5   | 0.2   | 0.2   | 0.1   | 0.1   | 0.1   | 0.2   | 0.1   |
| Prices:                   |             |       |       |       |       |       |       |       |       |       |       |       |       |
| Eggs, farm                | Cents/doz.  | 59.7  | 73.6  | 78.8  | 74.8  | 68.6  | 66.9  | 68.6  | 70.4  | 72.2  | 73.9  | 75.7  | 77.4  |
| New York, Grade A large   | Cents/doz.  | 67.1  | 85.3  | 90.0  | 85.0  | 78.0  | 76.0  | 78.0  | 80.0  | 82.0  | 84.0  | 86.0  | 88.0  |
| Deflated wholesale prices | Cents/doz.  | 37.3  | 46.4  | 48.1  | 44.4  | 39.8  | 37.8  | 37.8  | 37.9  | 37.9  | 37.8  | 37.8  | 37.7  |
| Retail, Grade A, large    | Cents/doz.  | 103   | 120   | 122   | 117   | 109   | 108   | 112   | 115   | 118   | 121   | 124   | 127   |
| Retail: Eggs              | 1982-84=100 | 138.2 | 155.1 | 155.0 | 149.6 | 141.2 | 140.6 | 147.3 | 152.1 | 156.9 | 161.8 | 166.5 | 171.4 |
| Costs and returns:        |             |       |       |       |       |       |       |       |       |       |       |       |       |
| Total costs               | Cents/doz.  | 62.43 | 69.93 | 72.31 | 70.26 | 69.74 | 71.29 | 73.67 | 75.47 | 77.20 | 79.59 | 80.38 | 81.18 |
| Net returns               | Cents/doz.  | 4.67  | 15.37 | 17.69 | 14.74 | 8.26  | 4.71  | 4.33  | 4.53  | 4.80  | 4.41  | 5.62  | 6.82  |

Table 28. Dairy baseline

| Table 20. Daily baseline             |             |         |         |         |         |         |         |         |         |         |         |         |         |
|--------------------------------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| ltem                                 | Units       | 2002/03 | 2003/04 | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 |
| 5 1 2 1 .                            |             |         |         |         |         |         |         |         |         |         |         |         |         |
| Production data:                     |             |         |         |         |         |         |         |         |         |         |         |         |         |
| Number of cows                       | 1,000       | 9,120   | 8,980   | 8,890   | 8,795   | 8,725   | 8,660   | 8,600   | 8,540   | 8,480   | 8,425   | 8,375   | 8,330   |
| Milk per cow                         | Pounds      | 18,630  | 19,085  | 19,460  | 19,865  | 20,305  | 20,815  | 21,235  | 21,710  | 22,195  | 22,725  | 23,140  | 23,635  |
| Milk production                      | Bil. lbs.   | 169.9   | 171.4   | 173.0   | 174.7   | 177.2   | 180.3   | 182.6   | 185.4   | 188.2   | 191.5   | 193.8   | 196.9   |
| Commercial use:                      |             |         |         |         |         |         |         |         |         |         |         |         |         |
| Milkfat basis                        | Bil. lbs.   | 172.7   | 176.7   | 175.9   | 178.0   | 180.4   | 183.6   | 186.0   | 188.8   | 191.7   | 194.9   | 197.4   | 200.4   |
| Skim solids                          | Bil. lbs.   | 164.3   | 169.5   | 171.6   | 174.9   | 178.8   | 182.1   | 185.4   | 188.0   | 191.1   | 194.0   | 196.8   | 199.5   |
| Net removals:                        |             |         |         |         |         |         |         |         |         |         |         |         |         |
| Milkfat basis                        | Bil. lbs.   | 1.2     | 0.5     | 1.1     | 1.1     | 1.1     | 1.1     | 1.1     | 1.1     | 1.1     | 1.1     | 1.1     | 1.1     |
| Skim solids                          | Bil. lbs.   | 9.2     | 6.1     | 5.2     | 3.9     | 2.5     | 1.7     | 1.7     | 1.7     | 1.7     | 1.7     | 1.7     | 1.7     |
| Prices:                              |             |         |         |         |         |         |         |         |         |         |         |         |         |
| All milk                             | \$/cwt      | 11.90   | 12.50   | 12.95   | 13.60   | 13.95   | 14.25   | 14.30   | 14.45   | 14.60   | 14.70   | 14.90   | 15.15   |
| Manufactured milk value <sup>1</sup> | \$/cwt      | 11.05   | 11.50   | 11.90   | 12.45   | 12.75   | 13.00   | 13.05   | 13.20   | 13.35   | 13.45   | 13.65   | 13.85   |
| Retail, all dairy products           | 1982-84=100 | 166.6   | 173.3   | 179.0   | 182.5   | 187.5   | 192.5   | 197.0   | 201.5   | 206.5   | 211.0   | 216.5   | 222.0   |
| Costs and returns:                   |             |         |         |         |         |         |         |         |         |         |         |         |         |
| Ration value                         | \$/cwt      | 7.76    | 7.86    | 7.70    | 7.75    | 7.90    | 8.05    | 8.10    | 8.15    | 8.30    | 8.35    | 8.30    | 8.45    |
| Returns above                        |             |         |         |         |         |         |         |         |         |         |         |         |         |
| concentrate costs                    | \$/cwt      | 8.68    | 9.24    | 9.75    | 10.38   | 10.67   | 10.91   | 10.94   | 11.07   | 11.16   | 11.23   | 11.46   | 11.64   |
| Milk-feed ratio                      | ratio       | 1.53    | 1.59    | 1.68    | 1.75    | 1.77    | 1.77    | 1.77    | 1.77    | 1.76    | 1.76    | 1.80    | 1.79    |

<sup>1/</sup> Estimated value of milk used in manufactured products.