

**CORN AND SOYBEANS: Production Costs and Returns,  
Heartland Region, 2003-2004 1/ 2/**

Item	Corn		Soybeans	
	2003	2004	2003	2004
	<u>Dollars Per Planted Acre</u>		<u>Dollars Per Planted Acre</u>	
<b>Gross value of production</b> (excluding direct Government payments)				
Total gross value of production	331.06	376.17	237.11	272.08
<b>Operating Costs</b>				
Seed	34.89	37.05	27.78	29.56
Fertilizer, lime, and gypsum	45.00	48.90	6.87	7.59
Soil conditioners	0.09	0.10	0.09	0.10
Manure	1.60	1.74	0.48	0.51
Chemicals	26.50	27.11	17.40	16.61
Custom operations 3/	10.09	10.53	5.48	5.53
Fuel, lube, and electricity	18.81	25.41	7.16	7.72
Repairs	12.63	13.82	8.73	9.64
Interest on operating capital	0.79	1.26	1.39	0.61
Total operating cost	150.40	165.92	75.38	77.87
<b>Allocated overhead</b>				
Hired labor	2.30	2.30	1.24	1.27
Opportunity cost of unpaid labor	23.79	24.28	15.09	15.14
Capital recovery of machinery and equipment	53.06	58.11	40.68	44.92
Opportunity cost of land (rental rate)	100.28	103.58	95.93	98.97
Taxes and insurance	5.19	5.24	5.89	5.95
General farm overhead	10.93	11.17	12.10	12.35
Total allocated overhead	195.55	204.68	170.93	178.60
Total cost listed	345.95	370.60	246.31	256.47
<b>Value of production less total costs listed</b>	-14.89	5.57	-9.20	15.61
<b>Value of production less operating costs</b>	180.66	210.25	161.73	194.21
<b>Supporting information</b>				
Yield (bu./planted acre)	157	178	36	49
Price (dollars per bushel at harvest)	2.10	2.10	6.57	5.58
Enterprise size (planted acres) 1/	270	270	280	280
<b>Production practices 1/</b>				
Irrigated (percent)	5	5	5	5
Dryland (percent)	95	95	95	95

1/ Developed from survey base year 2001 for corn. Developed from survey base year 2002 for soybeans.

2/ The Heartland Region includes portions of South Dakota, Nebraska, Iowa, Missouri, Illinois, Indiana, Ohio, and Minnesota's Ag. Statistics Districts 4, 7, 8, and 9. Minnesota is also part of the Northern Crescent and Northern Great Plains Regions. Information is available about the Northern Crescent and Northern Great Plains Regions on the ERS websites listed below.

3/ Cost of custom operations, technical services, and commercial drying.

Source: Economic Research Service, United States Department of Agriculture, Washington, D.C.  
Internet Web Site ([www.ers.usda.gov/data](http://www.ers.usda.gov/data))

**WHEAT: Production Costs and Returns, Northern Plains Region, 1997-2004 1/ 2/**

Item	1997	1998	1999	2000	2001	2002	2003	2004
	<u>Dollars per Planted Acre</u>							
<b>Gross value of production</b> (excluding direct Government payments)								
Wheat	93.61	100.10	85.49	83.98	77.94	80.59	124.20	129.04
Wheat straw	0.74	1.74	1.42	1.67	1.85	2.39	2.07	1.70
Total, gross value of production	94.35	101.84	86.91	85.65	79.79	82.98	126.27	130.74
<b>Cash expenses</b>								
Seed	7.64	7.64	6.36	6.19	6.34	6.33	7.89	7.42
Fertilizer, lime, and gypsum	14.85	14.78	13.46	13.91	19.66	14.40	19.74	20.28
Chemicals	8.33	10.61	10.28	10.15	10.14	10.09	10.02	10.01
Custom operations	2.64	4.04	3.82	4.00	3.77	3.13	4.68	4.56
Fuel, lube, and electricity	6.74	4.25	4.16	6.06	6.03	5.22	7.02	7.32
Repairs	12.77	8.10	8.85	9.85	9.66	9.57	10.38	9.54
Hired Labor	2.52	1.45	1.48	1.60	1.67	1.70	1.80	1.86
Other variable cash expenses 3/	0.03	0.16	0.16	0.16	0.17	0.17	0.18	0.19
Total, variable cash expenses	55.52	51.03	48.57	51.92	57.44	50.61	61.71	61.18
General farm overhead	5.35	6.32	6.42	6.49	6.76	6.97	7.16	7.39
Taxes and insurance	9.61	3.76	3.81	3.85	3.95	3.99	4.08	4.15
Interest	9.47	1.19	1.11	1.45	0.94	0.41	0.32	0.47
Total, fixed cash expenses	24.43	11.27	11.34	11.79	11.65	11.37	11.56	12.01
Total, cash expenses	79.95	62.04	59.91	63.71	69.09	61.98	73.27	73.19
<b>Gross value of production less cash expenses listed</b>	14.40	39.80	27.00	21.94	10.70	21.00	53.00	57.55
<b>Harvest-period price (dollars/bu.)</b>	3.81	2.91	2.68	2.50	2.66	3.55	3.29	3.35
<b>Yield (bu./planted acre)</b>	24.57	34.40	31.90	33.60	29.30	22.70	37.80	38.52

1/ Data for 1996-1997 refer to the Northern Plains Region which includes Minnesota, North Dakota, South Dakota, Montana, and Wyoming.

2/ Data for 1998 and later refer to the Northern Great Plains Region which includes North Dakota, South Dakota, and parts of Montana, Wyoming, Nebraska and Minnesota.

3/ Cost of purchased irrigation water and baling.

Source: Economic Research Service, United States Department of Agriculture, Washington, D.C.

Internet Web Site ([www.ers.usda.gov/data/](http://www.ers.usda.gov/data/))

**BARLEY: Production Costs and Returns, Northern Plains Region, 1997-2004 1/ 2/**

Item	1997	1998	1999	2000	2001	2002	2003	2004
	<u>Dollars per Planted Acre</u>							
<b>Gross value of production</b> (excluding direct Government payments)								
Barley	91.83	79.90	73.27	68.82	75.98	69.85	154.11	137.12
Barley straw	2.67	2.07	1.79	2.02	2.07	2.33	4.13	4.33
Total, gross value of production	94.50	81.97	75.09	70.84	78.05	72.18	158.24	141.45
<b>Cash expenses</b>								
Seed	6.77	6.30	5.73	5.84	5.84	5.81	8.21	7.89
Fertilizer, lime, and gypsum	16.68	14.49	13.52	13.80	18.15	14.16	16.43	17.45
Chemicals	7.97	8.11	8.14	7.77	7.93	7.88	12.16	12.16
Custom operations	3.39	3.49	3.68	3.64	3.77	3.72	6.13	6.18
Fuel, lube, and electricity	8.59	7.55	7.72	10.28	8.92	8.30	7.76	9.03
Repairs	13.87	14.08	14.25	14.91	15.02	14.58	14.24	14.56
Hired Labor	4.40	4.50	4.65	4.88	5.23	5.18	1.97	2.02
Other variable cash expenses 3/	1.04	1.06	1.32	1.14	1.32	1.19	0.69	0.70
Total, variable cash expenses	62.71	59.58	59.01	62.26	66.18	60.82	67.59	69.99
General farm overhead	7.58	6.07	5.77	5.82	6.01	6.15	8.10	8.28
Taxes and insurance	12.13	11.14	10.39	10.70	10.70	10.89	6.77	6.88
Interest 4/	12.20	11.33	11.40	11.40	12.15	10.84	0.35	0.54
Total, fixed cash expenses	31.91	28.54	27.56	27.92	28.86	27.88	15.22	15.70
Total, cash expenses	94.62	88.12	86.57	90.18	95.04	88.70	82.81	85.69
<b>Gross value of production less cash expenses listed</b>	-0.12	-6.15	-11.51	-19.34	-16.99	-16.52	75.43	55.76
<b>Harvest-period price (dollars/bu.)</b>	2.11	1.69	1.73	1.59	1.83	2.14	2.82	2.48
<b>Yield (bu./planted acre)</b>	43.52	47.28	42.35	43.28	41.52	32.64	54.70	55.40

1/ Data for 1996-2002 refer to the Northern Plains Region which includes Minnesota, North Dakota, South Dakota, Montana, and Wyoming.

2/ Data for 2003 and later refer to the Northern Great Plains Region which includes North Dakota, portions of Nebraska, Colorado, Wyoming, South Dakota, Montana, and Minnesota Ag. Statistics District 10.

3/ Cost of purchased irrigation water and baling.

4/ Data for 2003 includes interest on operating inputs only.

Source: Economic Research Service, United States Department of Agriculture, Washington, D.C.

Internet Web Site ([www.ers.usda.gov/data/](http://www.ers.usda.gov/data/))

**OATS: Production Costs and Returns, North Central Region, 1997-2004 1/**

Item	1997	1998	1999	2000	2001	2002	2003	2004
	<u>Dollars per Planted Acre</u>							
<b>Gross value of production</b> (excluding direct Government payments)								
Oats	104.46	64.03	68.26	69.90	85.42	103.02	119.02	94.43
Oats straw	49.88	44.21	45.34	46.48	48.18	48.77	49.35	49.89
Total, gross value of production	154.34	108.24	113.60	116.38	133.60	151.79	168.37	144.32
<b>Cash expenses</b>								
Seed	10.10	9.72	9.02	8.30	8.23	8.11	10.53	9.96
Fertilizer, lime, and gypsum	20.09	19.10	17.90	18.24	21.16	18.39	20.14	22.09
Chemicals	1.27	1.27	1.26	1.25	1.27	1.28	1.29	1.28
Custom operations 2/	5.71	5.73	5.75	5.76	5.82	5.78	5.80	5.83
Fuel, lube, and electricity	4.33	3.54	3.72	5.52	5.19	4.53	6.28	7.30
Repairs	7.63	7.10	6.70	6.57	6.69	6.77	6.80	7.38
Hired Labor	1.81	1.91	2.00	2.18	2.17	2.31	2.57	2.49
Other variable cash expenses 3/	1.84	1.63	1.67	1.71	1.78	1.80	1.82	1.84
Total, variable cash expenses	52.78	50.00	48.02	49.53	52.31	48.97	55.23	58.17
General farm overhead	5.31	5.01	5.08	5.21	5.38	5.50	5.63	5.76
Taxes and insurance	20.15	19.58	20.15	21.16	21.54	21.32	21.76	21.98
Interest	6.17	6.50	6.13	6.48	6.60	6.02	6.02	5.96
Total, fixed cash expenses	31.63	31.09	31.36	32.85	33.52	32.84	33.41	33.70
Total, cash expenses	84.41	81.09	79.38	82.38	85.83	81.81	88.64	91.87
<b>Gross value of production less cash expenses listed</b>	69.93	27.15	34.22	34.00	47.77	69.98	79.73	52.45
<b>Harvest-period price (dollars/bu.)</b>	1.62	1.09	1.10	1.02	1.32	1.67	1.67	1.41
<b>Yield (bu./planted acre)</b>	64.48	58.74	62.05	68.53	64.71	61.69	71.27	66.97

1/ The North Central Region includes Minnesota, Iowa, Wisconsin, Illinois, Michigan, and Ohio.

2/ Cost of custom operations and technical service.

3/ Cost of baling.

Note: Survey base changed in 1994.

Source: Economic Research Service, United States Department of Agriculture, Washington, D.C.

Internet Web Site: ([www.ers.usda.gov/data/](http://www.ers.usda.gov/data/))**SUGARBEETS: Production Costs and Returns, Red River Valley, 1997-2004 1/**

Item	1997	1998	1999	2000	2001	2002	2003	2004
	<u>Dollars per Planted Acre</u>							
<b>Gross value of production</b>								
Beets – gross value of production	697.50	733.42	739.11	723.06	752.49	721.69	911.27	728.64
<b>Cash expenses</b>								
Seed	44.81	46.39	45.55	44.89	45.01	48.02	48.02	51.67
Fertilizer	39.86	35.68	33.83	28.74	37.21	29.79	36.96	39.10
Chemicals	71.13	71.43	70.62	109.03	109.80	109.72	109.60	108.30
Custom operations	23.30	25.78	24.79	23.49	23.02	23.53	24.81	24.73
Fuel, lube, and electricity	20.73	18.43	19.18	24.86	24.55	23.07	24.40	28.03
Repairs	31.53	33.53	34.38	32.52	34.59	37.00	38.59	38.93
Hired Labor	83.06	86.06	84.88	51.76	55.21	55.95	58.44	61.89
Purchased irrigation water	0.05	0.05	0.04	0.06	0.06	0.06	0.06	0.07
Freight and dirt hauling charges	11.81	11.25	10.85	13.62	13.91	13.88	15.08	15.54
Miscellaneous 2/	16.94	15.71	15.77	13.30	13.75	13.65	14.39	15.14
Hauling allowance (-)	-11.36	-10.75	-10.36	-10.34	-10.44	-10.45	-10.45	-10.45
Total, variable cash expenses	331.86	335.56	329.53	331.93	346.67	344.22	359.90	393.85
General farm overhead	30.90	28.98	29.48	27.55	28.30	28.92	29.58	30.24
Taxes and insurance	39.24	40.39	40.76	14.57	12.59	12.84	13.13	13.43
Interest	41.99	48.63	49.59	8.38	4.96	2.44	1.60	2.46
Total, fixed cash expenses	112.13	118.00	119.83	50.50	45.85	44.20	44.31	46.13
Total, cash expenses	443.99	451.56	449.36	382.43	392.52	388.42	404.21	439.98
<b>Gross value of production less cash expenses listed</b>	253.51	281.86	289.75	340.63	366.97	333.27	507.06	288.66
<b>Season-average price (dollars/ton) 3/</b>	38.43	35.21	37.16	35.10	42.27	39.01	44.89	36.80
<b>Yield (net tons/planted acre)</b>	18.15	20.83	19.89	20.60	17.80	18.50	20.30	19.80

1/ The Red River Valley Region includes Minnesota and eastern North Dakota.

2/ Includes costs deducted by the processor from the net payment and noncash benefits.

3/ Sugarbeet prices for 2004 were held at the U.S. level because State prices for 2004 were unavailable at the time of publication.

Source: Economic Research Service, United States Department of Agriculture, Washington, D.C.

Internet Web Site: ([www.ers.usda.gov/data/](http://www.ers.usda.gov/data/))

**HOG PRODUCTION: Farrow-to-Finish, Farrow-to-Feeder,  
Feeder Pig-to-Finish, Costs and Returns, Heartland Region, 2004 1/**

Item	All Hog Producers	Farrow to Finish	Farrow to Feeder 2/	Feeder Pig To Finish
	<u>Dollars per Cwt Gain 3/</u>			
<b>Gross value of production</b>				
Market hogs	48.09	47.35	2.31	57.72
Feeder pigs	12.60	0.90	126.41	0.18
Cull stock	1.37	2.42	3.55	0.01
Breeding stock	0.63	0.22	0.25	0.01
Inventory change	-0.17	0.05	-6.65	1.11
Other income 4/	1.86	1.76	1.54	2.04
Total gross value of production	64.38	52.70	127.41	61.07
<b>Operating costs</b>				
Feed				
Grain	8.04	10.21	1.91	6.57
Protein sources	9.63	13.55	1.09	6.17
Complete mixes	9.78	5.95	30.80	10.94
Other feed items 5/	0.25	0.43	0.25	0.09
Total feed costs	27.70	30.14	34.05	23.77
Other				
Feeder pigs	15.43	0.08	0.71	33.30
Veterinary and medicine	1.22	1.67	2.74	0.56
Bedding and litter	0.03	0.04	0.06	0.02
Marketing	0.67	0.34	3.81	0.58
Custom services	0.34	0.29	0.29	0.42
Fuel, lube, and electricity	1.77	1.90	4.58	1.12
Repairs	0.97	1.38	1.22	0.45
Other operating costs 6/	0.04	0.03	0.04	0.03
Interest on operating capital	0.38	0.28	0.37	0.47
Total operating costs	48.55	36.15	47.87	60.72
<b>Allocated overhead</b>				
Hired labor	2.82	3.28	13.77	0.48
Opportunity cost of unpaid labor	5.54	7.09	7.33	3.33
Capital recovery of machinery and equipment 7/	11.89	12.66	30.67	7.46
Opportunity cost of land (rental rate)	0.05	0.06	0.08	0.02
Taxes and insurance	0.49	0.54	0.94	0.36
General farm overhead	1.05	1.17	1.63	0.79
Total, allocated overhead	21.84	24.80	54.42	12.44
 Total costs listed	 70.39	 60.45	 102.29	 73.16
<b>Value of production less total costs listed</b>	-6.01	-8.25	25.12	-12.09
<b>Value of production less operating costs</b>	15.83	16.55	79.54	0.35
<b>Supporting information</b>				
Production arrangement (percent of production)				
Independent	69	99	22	47
Under contract	31	1	78	53
Size of operation (head sold/removed)				
Market hogs	2,085	1,896	80	2,931
Feeder pigs	1,226	61	10,738	13

1/ The Heartland Region includes portions of South Dakota, Nebraska, Iowa, Missouri, Illinois, Indiana, Ohio, and Minnesota's Ag. Statistics Districts 4, 7, 8, and 9. Minnesota is also part of the Northern Crescent and Northern Great Plains Regions. Information is available about the Northern Crescent and Northern Great Plains Regions on the ERS website. Developed from survey base year, 1998.

2/ Farrow to Feeder data are for the United States (Heartland Region data are not available).

3/ Cwt gain=(cwt sold-cwt purchased) + cwt inventory change.

4/ Value of manure production.

5/ Milk replacer, milk, milk by-products, antibiotics, and other medicated additives.

6/ Costs for odor control, fees, permits, licenses, and other regulatory costs.

7/ Machinery and equipment, and housing, manure handling, and feed storage structures, and breeding herd.

Source: Economic Research Service, United States Department of Agriculture, Washington, D.C.

Internet Web Site ([www.ers.usda.gov/data/](http://www.ers.usda.gov/data/))

**COW-CALF: Production Costs and Returns, Heartland Region, 2003-2004 1/**

Item	2003	2004
	<u>Dollars per Bred Cow</u>	
<b>Gross value of production</b>		
Steer calves	187.53	221.71
Heifer calves	126.15	148.89
Yearling steers	40.79	44.97
Yearling heifers	12.55	13.89
Other cattle	75.11	87.79
Total gross value of production	446.51	521.64
<b>Operating costs</b>		
Purchased cattle for backgrounding	26.60	30.20
Feed		
Concentrates and other feed	26.86	33.12
Supplemental feed	41.96	32.80
Harvested forages	189.51	184.41
Cropland pasture	13.36	14.33
Private pasture	76.01	82.31
Public land	0.35	0.37
Total feed costs	348.05	347.34
Other		
Veterinary and medicine	39.47	40.15
Bedding and litter	1.37	1.40
Marketing	4.38	4.39
Custom operations	41.12	41.62
Fuel, lube, and electricity	26.09	29.23
Repairs	29.96	30.29
Interest on operating inputs	2.76	4.12
Total operating costs	519.80	528.74
<b>Allocated overhead</b>		
Hired labor	0.64	0.64
Opportunity cost of unpaid labor	230.47	233.01
Capital recovery cost of machinery and equipment	281.21	299.89
Opportunity cost of land	5.72	6.01
Taxes and insurance	44.94	45.84
General farm overhead	85.88	88.36
Total allocated overhead	648.86	673.75
 Total cost listed	 1,168.66	 1,202.49
<b>Value of production less total costs listed</b>	<b>-722.15</b>	<b>-680.85</b>
<b>Value of production less operating costs</b>	<b>-73.29</b>	<b>-7.10</b>

1/ The Heartland Region includes portions of South Dakota, Nebraska, Iowa, Missouri, Illinois, Indiana, Ohio, and Minnesota's Ag. Statistics Districts 4, 7, 8, and 9. Minnesota is also part of the Northern Crescent and Northern Great Plains Regions. Information is available about the Northern Crescent and Northern Great Plains Regions on the ERS website listed below. Developed from survey base year, 1996.  
Source: Economic Research Service, United States Department of Agriculture, Washington, D.C.  
Internet Web Site ([www.ers.usda.gov/data/](http://www.ers.usda.gov/data/))



**MILK: Production Costs and Returns, per cwt sold, 2003-2004 1/**

Item	Heartland 2/		Northern Crescent 3/	
	2003	2004	2003	2004
	Dollars per Cwt.			
<b>Gross value of production</b>				
Milk	12.93	16.71	13.41	17.29
Cattle	1.65	1.87	1.28	1.47
Other income 4/	0.97	1.06	0.75	0.81
Total gross value of production	15.55	19.64	15.44	19.57
<b>Operating costs</b>				
Feed				
Feed grains	2.35	1.77	1.49	1.19
Hay and straw	2.54	2.40	1.35	1.36
Complete feed mixes	0.96	1.19	1.25	1.38
Liquid whey and milk replacer	0.11	0.15	0.10	0.14
Silage	0.77	0.81	0.91	0.95
Grazed pasture and cropland	0.13	0.14	0.07	0.07
Other feed item 5/	1.59	1.79	1.29	1.48
Total feed costs	8.45	8.25	6.46	6.57
Other				
Veterinary and medicine	0.78	0.79	0.81	0.82
Bedding and litter	0.23	0.23	0.24	0.24
Marketing	0.22	0.22	0.32	0.32
Custom service	0.54	0.55	0.49	0.49
Fuel, lube, and electricity	0.56	0.62	0.58	0.64
Repairs	0.60	0.64	0.64	0.65
Other operating costs 6/	0.00	0.00	0.00	0.00
Interest on operating capital	0.06	0.09	0.05	0.08
Total operating costs	11.44	11.39	9.59	9.81
<b>Allocated overhead</b>				
Hired labor	0.85	0.90	1.38	1.41
Opportunity cost of unpaid labor	5.90	5.92	5.29	5.27
Capital recovery of machinery and equipment 7/	4.71	4.96	4.29	4.39
Opportunity cost of land (rental rate)	0.09	0.10	0.08	0.08
Taxes and insurance	0.20	0.20	0.23	0.23
General farm overhead	0.61	0.61	0.66	0.67
Total allocated overhead	12.36	12.69	11.93	12.05
 Total cost listed	 23.80	 24.08	 21.52	 21.86
<b>Value of production less total costs listed</b>	-8.25	-4.44	-6.08	-2.29
<b>Value of production less operating costs</b>	4.11	8.25	5.85	9.76
<b>Supporting information</b>				
Milk cows (head per farm)	61	62	70	71
Output per cow (pounds)	18,564	18,680	19,852	19,899
Milk frequency greater than twice per day (percent of farms)	1.95	2.11	3.13	3.21
Homegrown feed cost (percent of total feed cost)	59	59	49	48
Milk cows injected with BST (head per farm)	11	11	14	15

1/ Developed from survey base year, 2000.

2/ The Heartland Region includes MN Agricultural Statistics Districts (ASD) 4, 7, 8 and 9, SD ASD 6 and 9, NE ASD 3 and 6, IA, MO ASD 1, 2, 3, 4, 5 and 9, IL, IN, KY ASD 1 and 2, and Ohio ASD 1, 4, 5, 7 and 8.

3/ Northern Crescent Region includes New England, New York ASD 1, 2, 3, 5, 6, 8 and 9, Ohio ASD 2 and 3, MI, WI and MN ASD 2, 3, 5 and 6.

4/ Income from renting or leading dairy stock to other operations; renting space to other dairy operations; co-op patronage dividends associated with the dairy; assessment rebates, refunds, and other dairy related resources; and manure production.

5/ Cotton seed meal, protein supplements, protein byproducts, vitamin or mineral supplements, non-protein byproducts, alfalfa cubes or pellets, green chop, corn stalks, and antibiotics and other medicated additives.

6/ Manure disposal fees, permits, licenses, and odor control costs.

7/ Machinery and equipment, and housing, manure handling, and feed storage structures, and dairy breeding herd.

Source: Economic Research Service, United States Department of Agriculture, Washington, D.C.

Internet Web Site ([www.ers.usda.gov/data/](http://www.ers.usda.gov/data/))