

# Historical Costs of Crop Production

**Table 1. Estimated costs of soybean production in Iowa (\$ per acre)<sup>1</sup>**

Year	Machinery for Growing and Harvesting	Seed, Fertilizer, Chemicals, etc.	Labor	Land	Total	Expected Yield: bu/acre	Cost per Bushel
1975	\$ 27.05	\$ 48.00	\$ 12.00	\$ 96.00	\$ 183.05	40	\$ 4.58
1976	28.31	37.08	11.16	88.00	164.55	35	4.70
1977	31.73	41.00	12.51	98.00	183.24	35	5.24
1978	37.32	43.10	12.51	98.00	190.93	35	5.46
1979	40.99	46.15	13.90	102.00	203.04	35	5.80
1980	48.15	54.60	13.90	112.00	228.65	36	6.35
1981	57.70	65.60	15.40	118.00	256.70	38	6.76
1982	48.50	65.70	16.80	122.00	253.00	38	6.66
1983	47.80	64.75	16.80	120.00	249.35	38	6.56
1984	48.90	70.30	16.80	118.00	254.00	38	6.68
1985	48.15	71.35	16.80	115.00	251.30	38	6.61
1986	46.30	70.00	16.80	92.00	225.10	38	5.92
1987	42.85	65.15	16.80	74.00	198.80	38	5.23
1988	46.95	69.55	15.60	78.00	210.10	38	5.53
1989	52.52	74.96	15.60	84.00	227.08	38	5.98
1990	52.68	74.15	15.60	84.00	226.43	38	5.96
1991 <sup>2</sup>	61.00	74.49	15.60	88.00	239.09	38	6.29
1992 <sup>3</sup>	45.45	74.95	15.60	88.00	224.00	38	5.89
1993	46.29	79.87	15.60	92.00	233.76	45	5.19
1994	45.85	77.86	15.60	100.00	239.31	45	5.32
1995	47.91	75.40	18.20	105.00	246.51	45	5.48
1996	40.85	83.95	18.20	110.00	253.00	45	5.62
1997	39.78	86.30	18.20	120.00	264.28	45	5.87
1998	36.90	91.99	15.75	125.00	269.64	45	5.99
1999	39.25	90.39	15.75	125.00	270.39	45	6.01
2000	42.36	89.44	18.99	120.00	270.79	45	6.02
2001	42.84	88.95	19.60	120.00	271.39	45	6.03
2002	41.39	87.46	19.60	125.00	273.45	45	6.08
2003	43.39	84.47	22.05	135.00	284.91	45	6.33
2004	41.52	90.76	23.28	140.00	295.56	45	6.57
2005 <sup>4</sup>	40.53	96.53	23.28	140.00	300.34	45	6.67
2006	45.90	106.79	25.73	145.00	323.42	45	7.19
2007	46.76	107.58	26.95	155.00	336.29	50	6.73
2008	48.50	124.16	26.95	190.00	389.61	50	7.79
2009	55.80	202.85	26.95	205.00	490.60	50	9.81
2010	57.70	154.00	26.95	195.00	433.65	50	8.67
2011	72.70	156.52	28.42	215.00	472.64	50	9.45
2012	80.70	180.89	26.33	258.00	545.92	50	10.92
2013	80.70	163.44	27.56	276.00	547.71	50	10.95
2014	84.70	155.65	29.25	287.00	556.60	50	11.13
2015	79.17	166.38	29.25	273.00	547.80	50	10.96
2016	75.43	162.63	29.25	266.00	533.30	50	10.67
2017 <sup>5</sup>	67.40	157.11	28.60	230.00	483.11	50	9.66
2018	68.67	154.41	30.80	219.00	472.89	50	9.46
2019 <sup>6</sup>	68.43	183.60	31.35	223.00	506.38	56	9.04
2020	68.11	168.52	32.45	219.00	488.09	56	8.72
2021	63.86	181.24	33.55	222.00	500.65	56	8.94
2022	72.74	232.82	37.40	232.00	574.96	57	10.09
2023	86.05	286.76	39.60	285.00	697.41	59	11.82

1. Summarized from annual editions of A1-20, [Estimated Costs of Crop Production in Iowa](http://www.extension.iastate.edu/agdm/crops/html/a1-20.html), www.extension.iastate.edu/agdm/crops/html/a1-20.html.
2. Change in machinery mix used to estimate costs.
3. Change in machinery prices and fertilizer mix to estimate costs.
4. Beginning in 2005, soybean estimates are for herbicide-tolerant varieties.
5. Change in capacity and efficiency of machinery used to estimate costs.
6. Expected yields updated to reflect 30-year trend yields.

**Table 2. Estimated costs of corn production in Iowa (\$ per acre)<sup>1</sup>**

Year	Machinery for Growing and Harvesting	Seed, Fertilizer, Chemicals, etc.	Labor	Land	Total	Expected Yield: bu/acre	Cost per Bushel
1975	\$ 48.80	\$ 88.90	\$ 16.40	\$ 96.00	\$ 250.10	125	\$ 2.00
1976	49.17	71.71	15.08	88.00	223.96	110	2.04
1977	56.09	72.30	16.29	98.00	242.68	110	2.21
1978	66.26	72.30	16.20	98.00	252.76	110	2.30
1979	73.22	74.35	18.00	102.00	267.57	110	2.43
1980	85.39	88.10	18.00	112.00	303.49	115	2.64
1981	83.37	90.64	18.09	118.00	310.09	115	2.70
1982	79.57	95.16	19.69	122.00	316.42	115	2.75
1983	82.90	90.85	19.20	120.00	312.95	115	2.72
1984	81.60	102.00	19.20	118.00	320.80	115	2.79
1985	77.83	110.12	19.63	115.00	322.58	115	2.81
1986	78.37	102.80	19.37	92.00	292.54	119	2.45
1987	72.95	93.10	19.20	74.00	259.25	120	2.16
1988	73.50	95.93	18.00	78.00	265.43	125	2.12
1989	81.21	104.72	18.18	84.00	288.10	124	2.32
1990	77.39	106.54	18.27	84.00	286.20	124	2.31
1991 <sup>2</sup>	91.82	98.38	18.34	88.00	296.53	124	2.40
1992 <sup>3</sup>	70.71	101.79	18.41	88.00	278.92	123	2.26
1993	74.78	113.93	18.30	92.00	299.00	133	2.25
1994	74.25	106.45	18.23	100.00	298.93	134	2.24
1995	76.08	110.88	21.16	105.00	313.13	134	2.33
1996	66.61	120.32	21.22	110.00	318.15	134	2.38
1997	65.69	123.97	21.16	120.00	330.82	134	2.47
1998	63.56	123.72	21.00	125.00	333.28	135	2.47
1999	66.26	120.96	21.00	125.00	333.22	135	2.47
2000	67.35	120.85	20.15	120.00	328.35	135	2.43
2001	78.98	126.21	20.80	120.00	345.99	135	2.56
2002	73.29	125.15	20.80	125.00	344.24	135	2.55
2003	79.53	125.00	23.39	135.00	362.92	150	2.42
2004	85.70	136.22	24.75	140.00	386.67	150	2.58
2005	93.43	157.72	24.84	140.00	415.99	149	2.79
2006	97.54	171.11	27.45	145.00	441.10	154	2.86
2007	100.59	194.76	29.05	155.00	479.40	158	3.04
2008	108.58	240.02	29.24	190.00	567.84	157	3.63
2009	114.29	350.76	29.03	205.00	699.08	158	4.43
2010	122.74	270.75	29.08	195.00	617.57	177	3.48
2011	151.79	308.74	30.76	215.00	706.28	177	3.99
2012	145.01	341.12	31.16	258.00	775.29	177	4.40
2013	144.91	335.10	32.52	276.00	788.53	177	4.46
2014	152.93	307.82	34.51	287.00	782.26	177	4.43
2015	142.66	319.75	34.36	273.00	769.77	177	4.34
2016	127.37	299.99	34.44	266.00	727.80	177	4.11
2017 <sup>4</sup>	117.23	258.85	33.82	230.00	639.90	177	3.62
2018	130.82	247.64	36.23	219.00	633.70	178	3.57
2019 <sup>5</sup>	132.61	286.10	36.99	223.00	678.70	195	3.48
2020	126.65	268.94	38.47	219.00	653.06	195	3.35
2021	125.44	283.99	39.53	222.00	670.96	198	3.39
2022 <sup>6</sup>	145.60	369.57	43.81	232.00	790.98	196	4.03
2023	202.93	439.25	46.39	285.00	973.56	200	4.86

1. Summarized from annual editions of A1-20, [Estimated Costs of Crop Production in Iowa](http://www.extension.iastate.edu/agdm/crops/html/a1-20.html), www.extension.iastate.edu/agdm/crops/html/a1-20.html. Costs for 1975-1980 represent continuous corn. Costs from 1981 to the present use the percent of continuous corn to calculate the weighted average corn production costs.

2. Change in machinery mix used to estimate costs.

3. Change in machinery prices and fertilizer mix to estimate costs.

4. Change in capacity and efficiency of machinery used to estimate costs.

5. Expected yields updated to reflect 30-year trend yields.

6. Reference yields are adjusted by the percent of the maximum yield attainable at the maximum return to nitrogen (MRTN) rate according to the [Corn Nitrogen Rate Calculator](http://www.extension.iastate.edu/agdm/crops/html/nitrogen_rate_calculator.html), cnrc.agron.iastate.edu.

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By Ann Johanns, extension program specialist  
515-337-2766, [aholste@iastate.edu](mailto:aholste@iastate.edu)  
Alejandro Plastina, extension economist  
515-294-6160, [plastina@iastate.edu](mailto:plastina@iastate.edu)  
[extension.iastate.edu/agdm](http://www.extension.iastate.edu/agdm)