

EC1090

(Revised January 2023)

Plotting a Course 2023

Short-term and Long-term Agricultural Planning Prices for North Dakota 2023

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Planning for the future can be a very frustrating process but one that typically pays high dividends. For most farm and ranch managers, developing realistic commodity price expectations is one of the most difficult and complex tasks of the planning process. To ease the burden of forecasting planning prices, NDSU Extension has prepared a summary of projected short- and long-term planning prices.

The estimated short-term planning prices should be used as a guide in setting price expectations for 2023 production. These planning prices can be used for preparing annual enterprise budgets and annual whole-farm cash-flow projections.

The short-term planning prices should **not** be used for planning capital purchases or expansion alternatives that extend beyond the next production year. Unfortunately, the use of short-term planning prices to make long-term decisions is common. This practice is not recommended because current supply/demand conditions rarely continue for long periods of time and are a poor indicator of future trends.

The long-term planning prices are valuable for evaluating alternative plans that affect the farm or ranch business for more than one year. Both individual yearly price forecasts and long-term average prices are presented.

The long-term crop planning prices were derived from annual average price forecasts made by the Food and Agricultural Policy Research Institute (FAPRI). The U.S. price estimates reported in the 2022 Baseline Briefing Paper, November 2022, were adjusted using historical relationships to reflect North Dakota farm gate prices.

Historical prices are reported for reference. This information can be a valuable reminder of past price fluctuations and trends. Prices for 2022 are averages to date.

The historical crop prices were obtained from the U.S. Department of Agriculture's National Agricultural Statistics Service (NASS) "2022 North Dakota Agricultural Statistics Service publication No. 91." Historical milk prices are from FAPRI. Historical feeder steer prices are from the USDA Agricultural Marketing Service (AMS) for Kist Livestock Auction, Mandan, N.D. Historical slaughter steer, cull cow, hog and sheep prices are from NASS and AMS.

NDSU

EXTENSION

CROPS

Marketing Year	Spring Wheat (bu)	Durum Wheat (bu)	Oats (bu)	Feed Barley (bu)	Malting Barley (bu)	Oil Sunflower (cwt)	Non-oil Sunflower (cwt)	Corn (bu)	Soybeans (bu)	Canola (cwt)	Flaxseed (bu)	Winter Wheat (bu)	Dry Beans (cwt)	Dry Peas (cwt)	Lentils (cwt)	Alfalfa Hay (ton)	Other Hay (ton)
2017	5.72	6.00	2.55	2.94	4.59	17.10	21.70	3.04	8.88	17.60	9.53	4.14	24.10	12.00	23.50	105.00	77.00
2018	5.12	4.83	2.41	3.13	4.43	17.10	23.40	3.32	7.98	15.80	9.89	5.05	22.90	10.50	14.80	91.00	68.00
2019	4.44	4.66	2.47	3.30	4.41	19.00	23.80	3.07	7.93	14.80	9.15	3.87	29.60	9.49	13.90	88.00	66.00
2020	5.11	5.98	2.54	3.51	4.76	20.50	26.50	4.44	10.20	18.50	11.10	4.82	28.90	10.60	18.20	89.00	71.00
2021	8.82	13.90	4.80	5.44	5.35	32.40	33.40	5.86	12.60	33.40	25.90	8.27	41.00	19.90	37.60	172.00	113.00
Historical avg. (2017-2021)	5.84	7.07	2.95	3.66	4.71	21.22	25.76	3.95	9.52	20.02	13.11	5.23	29.30	12.50	21.60	109.00	79.00
2022 (to date)*	9.07	10.61	4.71	5.92	7.59	27.10**	N.A.	6.06	13.53	31.55	19.42	8.59	39.22	19.14**	32.77**	137.46	86.71
2023 short-term	8.00	9.00	3.00	4.50	6.50	25.00	35.00	5.25	12.25	26.00	14.00	7.00	36.00	15.00	23.00	120.00	80.00
2024	7.08	7.68	2.77	3.60	5.76	22.44	32.31	4.42	11.16	21.00	12.00	6.09	33.48	11.72	29.30	110.00	75.00
2025	6.82	7.39	2.76	3.58	5.73	21.62	31.13	4.39	10.75	20.23	11.56	5.86	32.25	11.29	28.23	115.00	80.00
2026	6.68	7.24	2.72	3.53	5.65	21.19	30.51	4.33	10.54	19.83	11.33	5.74	31.62	11.07	27.68	112.00	75.00
2027	6.64	7.20	2.69	3.49	5.58	20.98	30.21	4.28	10.43	19.64	11.22	5.71	31.29	10.95	27.38	120.00	80.00
2028	6.58	7.13	2.64	3.43	5.49	20.78	29.92	4.20	10.33	19.44	11.11	5.66	30.99	10.85	27.13	125.00	85.00
Projected long-term avg. (2024-28)	6.76¹	7.33²	2.72³	3.53⁴	5.64⁵	21.40⁶	30.82⁷	4.32⁸	10.64⁹	20.03¹⁰	11.44¹¹	5.81¹²	31.93¹³	11.18¹⁴	27.94¹⁵	116.40	79.00

* average of beginning of marketing year to December 2022
 ** average of local cash bids
 Note: FAPRI projections are updated in January 2023

1 Spring wheat price is calculated based on the historical relationship: N.D. spring wheat = U.S. wheat x 1.07
 2 Durum wheat price is calculated based on the historical relationship: U.S. spring wheat x 1.16
 3 Oats price is calculated based on the historical relationship: N.D. oats = N.D. feed barley x 0.77
 4 Feed barley price is calculated based on the historical relationship: N.D. feed barley = U.S. corn x 0.75
 5 Malting barley price is calculated based on the historical relationship: N.D. malting barley = N.D. feed barley x 1.6
 6 Oil sunflower price is calculated based on the historical relationship: N.D. oil sunflower = U.S. soybean x 1.87
 7 Non-oil sunflower price is calculated based on the historical relationship: N.D. non-oil sunflower = N.D. oil sunflower x 1.44
 8 Corn price is calculated based on the historical relationship: N.D. corn = U.S. corn x 0.92
 9 Soybean price is calculated based on the historical relationship: N.D. soybean = U.S. soybean x 0.93
 10 Canola price is calculated based on the historical relationship: N.D. canola = U.S. soybean x 1.75
 11 Flaxseed price is calculated based on the historical relationship: N.D. flaxseed = U.S. soybean x 1.0
 12 Winter wheat price is calculated based on the historical relationship: N.D. winter wheat = U.S. wheat x 0.92
 13 Dry bean price is calculated based on the historical relationship: N.D. dry bean = N.D. soybean x 3.0
 14 Dry pea price is calculated based on the historical relationship: N.D. dry pea = N.D. soybean x 1.05
 15 Lentil price is calculated based on the historical relationship: N.D. lentil = N.D. dry pea x 2.5

BEEF

Year*	400-500 lb. Steers	500-600 lb. Steers	600-700 lb. Steers	700-800 lb. Steers	800-900 lb. Steers	1,100-1,700 lb. Cull Cows	5-Area Direct Slaughter Steers
	(bu) Fourth quarter prices	(bu) Fourth quarter prices	(bu) Fourth quarter prices	(bu) First quarter prices	(bu) First quarter prices	(cwt) Annual prices	(cwt) Annual prices
2017	194.23	177.01	166.22	151.40	141.74	68.80	121.52
2018	187.67	169.21	157.80	144.95	137.42	63.50	117.12
2019	168.41	156.01	145.11	143.89	135.51	62.00	116.78
2020	170.96	155.85	147.04	140.90	132.60	64.20	108.51
2021	192.30	173.62	163.51	165.69	155.56	70.20	123.17
Historical avg. (2017-2021)	182.71	166.34	155.94	149.37	140.57	65.74	117.42
2022 (to date)	227.27	204.74	190.84	180.00**	175.00**	84.00	144.52
2023 short-term	235.00	225.00	210.00	200.00**	195.00**	90.00	155.00
2024	245.00	235.00	220.00	210.00**	205.00**	95.00	165.00
2025	255.00	245.00	230.00	220.00**	215.00**	100.00	170.00
2026	260.00	250.00	235.00	225.00**	220.00**	100.00	175.00
2027	255.00	245.00	230.00	220.00**	215.00**	95.00	170.00
2028	250.00	240.00	225.00	215.00**	210.00**	90.00	165.00
Projected long-term avg. (2024-28)	253.00	243.00	228.00	218.00	213.00	96.00	169.00

* 400-500, 500-600 and 600-700 lb. weights are fourth quarter prices. 700-800 and 800-900 lb. weights are first quarter prices of the next year.
 To estimate heifer prices, subtract \$15/cwt for 400-500, 500-600 and 600-700 lb. animals and subtract \$6/cwt for 700-800 and 800-900 lb. animals.
 Cull cow and slaughter steer prices are calendar year averages.
 ** Projected for the first quarter of the next year.

HOGS

SHEEP

MILK

Year	250 lb. Slaughter Hogs	Slaughter Ewes	105-140 lb. Slaughter Lambs	60-90 lb. Feeder Lambs	All Milk
	(cwt)	(cwt)	(cwt)	(cwt)	(cwt)
2017	50.00	58.00	152.00	188.00	17.60
2018	47.00	45.00	141.00	177.00	16.20
2019	48.70	44.00	149.00	175.00	19.50
2020	44.80	62.00	144.00	189.00	19.90
2021	64.40	98.00	220.00	268.00	19.30
Historical avg. (2017-2021)	50.98	61.40	161.20	199.40	18.50
2022 (to date)	70.00	97.00	165.00	230.00	25.00
2023 short-term	68.00	75.00	150.00	180.00	23.00
2024	67.00	80.00	160.00	190.00	22.00
2025	68.00	82.00	170.00	200.00	23.00
2026	69.00	85.00	175.00	205.00	24.00
2027	70.00	86.00	180.00	210.00	25.00
2028	71.00	87.00	185.00	215.00	26.00
Projected long-term avg. (2024-28)	69.00	84.00	174.00	204.00	24.00

This publication is found at:

www.ag.ndsu.edu/pubs/agecon/market/ec1090.pdf

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