PURDUE UNIVERSITY

PURDUE EXTENSION
ID-166-W

2025 Purdue Crop Cost & Return Guide

February 2025 Estimates

Both product prices and input prices may have significantly changed since these estimates were prepared.

Table 1. Estimated per Acre Crop Budgets for Low, Average, and High Productivity Indiana Soils

	Crop Budgets for Three Yield Levels[1]														
	Low Productivity Soil					Average Productivity Soil					High Productivity Soil				
	Cont. Corn	**Rot. Corn**	**Rot. Beans**	**Wheat**	**DC Beans**	**Cont. Corn**	**Rot. Corn**	**Rot. Beans**	**Wheat**	**DC Beans**	**Cont. Corn**	**Rot. Corn**	**Rot. Beans**	**Wheat**	**DC Beans**
Expected yield per acre[2]	156	166	51	71	36	183	195	60	84	42	213	227	70	98	49
Harvest price[3]	$4.40	$4.40	$10.20	$5.70	$10.20	$4.40	$4.40	$10.20	$5.70	$10.20	$4.40	$4.40	$10.20	$5.70	$10.20
Market revenue	$686	$730	$520	$405	$367	$805	$858	$612	$479	$428	$937	$999	$714	$559	$500
Less variable costs[4]															
Fertilizer[5]	$204	$186	$72	$105	$50	$215	$198	$83	$129	$57	$227	$211	$95	$155	$65
Seed[6]	102	102	74	44	86	124	124	74	44	86	124	124	74	44	86
Pesticides[7]	125	119	75	40	58	125	119	75	40	58	125	119	75	40	58
Dryer fuel[8]	47	37	N/A	N/A	4	55	44	N/A	N/A	5	64	51	N/A	N/A	6
Machinery fuel @ $2.96	22	22	13	13	9	22	22	13	13	9	22	22	13	13	9
Machinery repairs[9]	45	45	40	40	25	45	45	40	40	25	45	45	40	40	25
Hauling[10]	16	17	5	7	4	19	20	6	9	4	22	24	7	10	5
Interest[11]	28	27	16	13	12	30	29	16	15	13	31	30	17	16	13
Insurance/misc.[12]	50	50	40	25	5	50	50	40	25	5	50	50	40	25	5
Total variable cost	$639	$605	$335	$287	$253	$685	$651	$347	$315	$262	$710	$676	$361	$343	$272
Contribution margin[13] (Revenue - variable costs) per acre	$47	$125	$185	$118	$114	$120	$207	$265	$164	$166	$227	$323	$353	$216	$228

[1]Estimated yields and costs are for yields with average management for three different soils representing low, average, and high productivity. The high productivity soils represent soils capable of producing corn and soybeans with yields about 20% higher than average soils. Low productivity soils represent soils capable of producing corn and soybeans with yields about 20% lower than the average soils.

[2]These yields assume average weather conditions and timely plant/harvest dates, except soybean double-crop yield, which is based on a July 1 planting date. Rotation corn, rotation soybean, and wheat yields for average soils are based on the long-run trends in state average yields reported by the Indiana office of the National Agricultural Statistics Service. Continuous corn yields are 94% of rotation corn yields. Double-crop soybean yields are 70% of full-season soybean yields. Continuous corn yields assume a chisel plow tillage system. Double-crop soybean yields apply to central and southern Indiana.

[3]Harvest corn price is December 2025 CME Group futures price less $0.25 basis. Harvest soybean price is November 2025 CME Group futures price less $0.35 basis. Harvest wheat price is July 2025 CME Group futures price less $.35 basis. Harvest prices were based on opening prices on February 7, 2025. These prices will change.

Table 1 (Continued)

[4]Input prices for variable costs reflect expected prices for 2025. These prices will vary by location and time of the year. Users need to adjust these prices to reflect their own expectations and price situation.

[5]Phosphate, potash, and lime applications are based on Tri-State Fertilizer Recommendations (Source: Purdue Extension Bulletin, AY-9-32, July 1995). Nitrogen application rate for corn is based on research from the Department of Agronomy, Purdue University. Anhydrous ammonia is used as the nitrogen source for corn. Urea is used as the nitrogen source for wheat. Sulfur is applied on continuous corn, rotation corn, and rotation soybeans. Pounds of N, P_20_5, K_20, and lime by crop and soil were as follows: continuous corn, 240-58-62-720, 240-68-69-720, 240-79-78-720; rotation corn, 200-61-65-600, 200-72-73-600, 200-84-81-600; rotation beans, 0-41-91-0, 0-48-104-0, 0-56-118-0; wheat, 58-45-46-172, 84-53-51-251, 110-62-58-330; double crop beans, 0-29-70-0, 0-34-79-0, 0-39-89-0. Fertilizer prices per lb.: NH_3 @ $0.46; urea @ $0.59; P_20_5 @ $0.71; K_20 @ $0.38; sulfer @ $0.59; and lime @ $60/ton spread on the field. For very poorly drained soils, consider increasing N rates by 5-10%. For well-drained soils, consider reducing N rates by 5-10%. All soil tests for phosphorus and potassium are assumed to be in the maintenance range, and the pH is in the recommended range.

[6]Corn seed prices assume a biotech variety with multiple traits. A 20%-refuge is planted with varieties that do not contain insect resistant traits, but do include herbicide tolerance. Seeding rates for corn are 27,000 seeds per acre on low productivity soils and 33,000 seeds per acre on average and high productivity soils. Soybean seed prices include Round-Up Ready® varieties. Rotation soybeans are drilled with a seeding rate of 169,000 seeds per acre with a 90% germination rate. Double-crop soybeans are drilled with a seeding rate of 195,000 seeds per acre. The seeding rate for wheat is two bushels per acre.

[7]Includes insecticides, herbicides, and fungicides. Pesticide costs can vary widely based on chemicals selected, required rate of application, and product pricing.

[8]Fuel used to dry crop to a safe moisture level for storage. For double-crop soybeans, the drying charge represents the drying of wheat in order to allow an earlier planting of soybeans.

[9]Repairs are based on approximately 5-year-old machinery. For older machinery, per acre repairs and downtime cost will be higher.

[10]Hauling charge represents moving grain from field to storage.

[11]Interest is based on 8.0% annual rate for 9 months for seed, fertilizer, and chemicals, and for 6 months for half the machinery fuel and repairs, and all miscellaneous expenses.

[12]Includes crop insurance, general farm insurance, and miscellaneous cost. The cost of crop insurance represents the premium projected for a Revenue Protection (RP) policy at the 80% coverage level. Crop insurance is included in budgets for corn and full-season soybeans, but is not included for wheat and double-crop soybeans.

[13]Contribution margin is the return to labor and management, machinery ownership, land resources, and risk.

Table 2. Estimated per Acre Government Payments, Overhead Costs & Earnings for Low, Average, and High Productivity Indiana Soils

	Low Productivity Soil				Average Productivity Soil				High Productivity Soil			
Farm Acres	900	1000	2700	3000	900	1000	2700	3000	900	1000	2700	3000
Rotation[1]	c-c	c-b	c-c	c-b	c-c	c-b	c-c	c-b	c-c	c-b	c-c	c-b
Crop contribution margin[2]	$47	$155	$47	$155	$120	$236	$120	$236	$227	$338	$227	$338
Government payment[3]	$10	$10	$10	$10	$10	$10	$10	$10	$10	$10	$10	$10
Total contribution margin	$57	$165	$57	$165	$130	$246	$130	$246	$237	$348	$237	$348
Annual overhead costs:												
Machinery ownership[4]	$155	$146	$103	$97	$155	$146	$103	$97	$155	$146	$103	$97
Family and hired labor[5]	$56	$50	$42	$38	$56	$50	$42	$38	$56	$50	$42	$38
Land[6]	$203	$203	$203	$203	$257	$257	$257	$257	$316	$316	$316	$316
Earnings or (losses)	-$356	-$234	-$291	-$173	-$338	-$207	-$272	-$146	-$290	-$164	-$224	-$103

[1]Rotations are as follows: c-c = all of the farm acres in continuous corn; c-b = one-half of the farm acres in rotation corn and one-half in rotation soybeans.

[2]Crop's contribution margin is the per acre contribution margin from Table 1.

[3]It is assumed that the current farm bill will provide ARC-CO or PLC payments of $10 per acre in 2025.

[4]The same basic machinery set, which is timely for each rotation, is used for both the c-c and c-b rotation. The larger farm size requires larger, more expensive machinery. Corn production utilizes a chisel plow tillage system, and soybeans utilize no-till. Average annual replacement costs for the larger farm size were calculated using the Purdue Machinery Cost Calculator for a timely machinery set. Seven-year trading policy is assumed for combine and planter, 10-year policy for other field machinery. On livestock farms where fewer hours each day are available for crops, or on small farms, machinery costs and/or labor costs will be higher. On well-drained soils where more days are suitable for spring field work, machinery costs could be lower. A 10-year trading policy was assumed for all machinery on the smaller acreages. Machinery ownership costs are likely to vary widely from farm to farm.

[5]For the larger acreages, operator labor expense incoroporates information pertaining to total family living, net nonfarm income, and income and self-employment taxes obtained from FINBIN, Center for Farm Financial Management, University of Minnesota. The larger acreages also included hired labor. FINBIN data was used to compute hourly hired labor wages. For the smaller acreages, labor expense includes the same family living withdrawal and no hired labor. Labor costs are likely to vary widely from farm to farm.

[6]Based on 2024 cash rent per bushel of corn yield reported in the article entitled "Farmland Prices Increase Despite Downward Pressure," Purdue Agricultural Economics Report, August, 2024. Cash rents are expected to remain stable through 2025.

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