

2016 Nebraska Crop Budgets

Developed and Edited by

Robert N. Klein, *Western Nebraska Extension Crops Specialist*

Roger K. Wilson, *Farm Management/Enterprise Budget Analyst*

Jessica T. Groskopf, *Extension Educator — Agricultural Economics*

Jim A. Jansen, *Extension Educator — Agricultural Economics*

Note: These budget projections were created using assumptions thought to be valid for many Nebraska producers; however, each farming operation is unique. These budgets are being released in both Adobe PDF and Excel® worksheet formats. The worksheet format allows producers to modify them to match their specific situation. The danger of releasing a tool that can subsequently be modified is that there is no way to verify whether alterations were made or unrealistic data was entered. Users of this tool are responsible for independently verifying all results prior to relying on them. Original files for these budgets are available at <http://extension.unl.edu/publications> and on <http://cropwatch.unl.edu/economics/budgets>.

Additional Resource Persons

The following individuals contributed to the budgets in their specialty areas:

Robert J. Wright, Extension Entomologist

Tamra A. Jackson-Ziems, Extension Plant Pathologist — Corn and Sorghum

Loren J. Giesler, Extension Plant Pathologist — Soybean and Turf

Stephen N. Wegulo, Extension Plant Pathologist — Wheat and Ornamental

Paul J. Jasa, Extension Biological Systems Engineer

James A. Schild, Extension Educator in Scotts Bluff and Morrill Counties

Extension is a Division of the Institute of Agriculture and Natural Resources at the University of Nebraska–Lincoln cooperating with the Counties and the United States Department of Agriculture.

University of Nebraska–Lincoln Extension educational programs abide with the nondiscrimination policies of the University of Nebraska–Lincoln and the United States Department of Agriculture.

2016 Budget 34-Dry Beans, Reduced Till with Wheat Cover Crop after Harvest (25 cwt Actual Yield)
Pivot Irrigated, 800 GPM 35 PSI, 8 acre/inches

Field Operations	Times or Qty	Unit	Labor @ \$20.00 /Hr	Fuel @ \$2.25 and Lube	Repairs		Ownership		Total	Your Estimate
					Power	Imp.	Power	Imp.		
1 Disk	1		2.02	1.97	0.29	1.24	4.14	1.21	10.87	
2 Field Cultivation	1		1.47	1.41	0.56	1.28	1.84	1.57	8.13	
3 Spray	1		1.00	0.27	0.33	0.64	1.11	0.88	4.23	
4 Plant	1		2.40	0.71	0.83	2.54	2.76	3.89	13.13	
5 Pivot E 125' Lift	8	ai	5.56	22.30	2.34	12.91	4.24	7.72	55.07	
6 Spray	1		1.00	0.27	0.33	0.64	1.11	0.88	4.23	
7 Aerial Spray	Custom									
8 Aerial Spray	Custom									
9 Pickett Windrowers	1		2.20	1.57	0.83	0.72	2.76	1.38	9.46	
10 Combine Irr Dry Beans	1		4.40	5.43	10.23	2.01	8.39	2.81	33.27	
11 Truck	Custom									
12 Drill	1		1.76	1.03	0.67	2.94	2.21	2.62	11.23	
Total for Field Operations			21.81	34.96	16.41	24.92	28.56	22.96	149.62	

Materials & Services	Operation Index	Percent Acres Applied	Application		Applied Price	Total	Your Estimate	
			Rate	Unit				
Outlook		3	100%	14	ounce	1.17	16.41	
Prowl H2O		3	100%	2	pint	6.50	13.00	
Edible Beans		4	100%	0.65	cwt	92.00	59.80	
10-34-0-1Z		4	100%	7	gallon	2.85	19.95	
32-0-0		4	100%	7	lbs N	0.47	3.29	
Electricity Fixed		5	100%	1	acre	30.00	30.00	
Basagran		6	60%	1	pint	10.00	6.00	
Raptor		6	60%	4	ounce	4.77	11.44	
NIS		6	60%	5	ounce	0.17	0.52	
UAN		6	60%	4	pint	0.21	0.50	
* Aerial Spray		7	60%	1	acre	9.50	5.70	
* Asana XL		7	60%	4.5	ounce	0.66	1.79	
Aerial Spray		8	100%	1	acre	9.50	9.50	
Copper		8	100%	2	pint	3.50	7.00	
Priaxor		8	100%	4	ounce	5.23	20.94	
Haul Grain (Dry Beans)		11	100%	25	cwt	0.28	7.00	
Wheat		12	100%	30	pound	0.12	3.60	
Scouting Dry Beans			100%	1	acre	10.00	10.00	
Dry Beans						16.30	16.30	
Total Materials & Services						242.74		

Electricity connect fee 6 months @ \$72/mo 133 acres 242.74

*Insecticide for Mexican bean beetle and Western Bean Cutworm (10%).
Total listed costs for Field Operations and Materials and Services 392.36

Interest on Operations Capital \$ 340.84 cash expense @ 5.50% for 6.0 mo. 9.37

Total Operating and Use Related Ownership Costs 401.73

Overhead (accounting, liability insurance, vehicle cost, office expense) 20.00

Real Estate Opportunity Pivot (Panhandle) \$ 3,625 per acre @ 4.00% 145.00

Real Estate Taxes \$ 3,625 per acre @ 1.00% 36.25

Total Cost per Acre Including Overhead 602.98

Cost per cwt 24.12

Cash Cost per cwt 15.46

2016 Budget 35-Dry Beans, Conventional Tillage (25 cwt Actual Yield)
Canal Irrigated, Gravity, 10 acre/inches

Field Operations	Times or Qty	Unit	Labor @ \$20.00 /Hr	Fuel @ \$2.25 and Lube	Repairs		Ownership		Total	Your Estimate
					Power	Imp.	Power	Imp.		
1 Chop Stalks	1		1.78	1.20	0.68	0.34	2.24	1.69	7.93	
2 Disk	2		4.03	3.93	0.58	2.49	8.29	2.41	21.73	
3 Spray	1		1.00	0.27	0.33	0.64	1.11	0.88	4.23	
4 Plow	1		2.93	2.07	0.42	0.83	6.03	0.56	12.84	
5 Roller Harrow	1		2.00	1.29	0.83	0.52	2.76	1.64	9.04	
6 Field Cultivation	1		1.47	1.41	0.56	1.28	1.84	1.57	8.13	
7 Plant	1		2.40	0.71	0.83	2.54	2.76	3.89	13.13	
8 Spray	0.6		0.60	0.16	0.20	0.38	0.66	0.53	2.53	
9 Row Crop Cultivation	1		2.00	0.82	0.76	0.44	2.51	1.64	8.17	
10 Ridge Cultivate/Ditch	1		1.83	1.15	0.69	0.37	2.30	1.64	7.98	
11 Ditch Irrigation	10	ai	11.11	0.00	0.00	0.00	0.00	0.00	11.11	
12 Aerial Spray	Custom									
13 Aerial Spray	Custom									
14 Pickett Windrowers	1		2.20	1.57	0.83	0.72	2.76	1.38	9.46	
15 Combine Irr Dry Beans	1		4.40	5.43	10.23	2.01	8.39	2.81	33.27	
16 Truck	Custom									
17 Chisel	1		1.98	1.93	0.75	2.02	2.49	1.57	10.74	
Total for Field Operations			39.73	21.94	17.69	14.58	44.14	22.21	160.29	

Materials & Services	Operation Index	Percent Acres Applied	Application Rate Unit	Applied Price	Total	Your Estimate
Outlook	Herbicide	3	100%	14 ounce	1.17	16.41
Prowl H2O	Herbicide	3	100%	2 pint	6.50	13.00
Edible Beans	Seed	7	100%	0.65 cwt	92.00	59.80
10-34-0-1Z	Fertilizer	7	100%	7 gallon	2.85	19.95
32-0-0	Fertilizer	7	100%	7 lbs N	0.47	3.29
Basagran	Herbicide	8	60%	1 pint	10.00	6.00
Raptor	Herbicide	8	60%	4 ounce	4.77	11.44
NIS	Additive	8	60%	5 ounce	0.17	0.52
UAN	Additive	8	60%	4 pint	0.21	0.50
* Aerial Spray	Custom	12	60%	1 acre	9.50	5.70
* Asana XL	Insecticide	12	60%	4.5 ounce	0.66	1.79
Aerial Spray	Custom	13	100%	1 acre	9.50	9.50
Copper	Fungicide	13	100%	2 pint	3.50	7.00
Priaxor	Fungicide	13	100%	4 ounce	5.23	20.94
Haul Grain (Dry Beans)	Custom	16	100%	25 cwt	0.28	7.00
Irrigation District O&M Charge	Other	11	100%	1 acre	30.00	30.00
Scouting Dry Beans	Scouting		100%	1 acre	10.00	10.00
Dry Beans	Crop Insurance				16.30	16.30
Total Materials & Services					239.14	

* Mexican Bean Beetle and Western Bean Cutworm

Total listed costs for Field Operations and Materials and Services	399.43
Interest on Operations Capital \$ 333.08 cash expense @ 5.50% for 6.0 mo.	9.16

Total Operating and Use Related Ownership Costs	408.59
--	--------

Overhead (accounting, liability insurance, vehicle cost, office expense) 20.00

Real Estate Opportunity Gravity (Panhandle) \$ 3,235 per acre @ 4.00%	129.40
Real Estate Taxes \$ 3,235 per acre @ 1.00%	32.35

Total Cost per Acre Including Overhead	590.34
---	--------

Cost per cwt	23.61
---------------------	-------

Cash Cost per cwt	14.98
--------------------------	-------

2016 Budget 36-Dry Beans, Conventional Tillage Using Pumped Water (25 cwt Actual Yield)
Pivot Irrigated, 800 GPM 35 PSI, 9 acre/inches

	Field Operations	Times or Qty	Unit	Labor @ \$20.00 /Hr	Fuel @ \$2.25 and Lube	Repairs		Ownership		Total	Your Estimate
						Power	Imp.	Power	Imp.		
1	Disk	2		4.03	3.93	0.58	2.49	8.29	2.41	21.73	
2	Chisel	1		1.98	1.93	0.75	2.02	2.49	1.57	10.74	
3	Spray	1		1.00	0.27	0.33	0.64	1.11	0.88	4.23	
4	Field Cultivation	1		1.47	1.41	0.56	1.28	1.84	1.57	8.13	
5	Plant	1		2.40	0.71	0.83	2.54	2.76	3.89	13.13	
6	Spray	0.6		0.60	0.16	0.20	0.38	0.66	0.53	2.53	
7	Row Crop Cultivation	1		2.00	0.82	0.76	0.44	2.51	1.64	8.17	
8	Pivot E 125' Lift	9	ai	6.25	25.08	2.63	14.53	4.77	8.69	61.95	
9	Aerial Spray	Custom									
10	Aerial Spray	Custom									
11	Pickett Windrowers	1		2.20	1.57	0.83	0.72	2.76	1.38	9.46	
12	Combine Irr Dry Beans	1		4.40	5.43	10.23	2.01	8.39	2.81	33.27	
13	Truck	Custom									
Total for Field Operations				26.33	41.31	17.70	27.05	35.58	25.37	173.34	

Materials & Services		Operation Index	Percent Acres Applied	Application		Applied Price	Total	Your Estimate	
				Rate	Unit				
Outlook	Herbicide	3	100%	14	ounce	1.17	16.41		
Prowl H2O	Herbicide	3	100%	2	pint	6.50	13.00		
Edible Beans	Seed	5	100%	0.65	cwt	92.00	59.80		
10-34-0-1Z	Fertilizer	5	100%	7	gallon	2.85	19.95		
32-0-0	Fertilizer	5	100%	7	lbs N	0.47	3.29		
Raptor	Herbicide	6	60%	4	ounce	4.77	11.44		
Basagran	Herbicide	6	60%	1	pint	10.00	6.00		
NIS	Additive	6	60%	5	ounce	0.17	0.52		
UAN	Additive	6	60%	4	pint	0.21	0.50		
Electricity Fixed	Other	8	100%	1	acre	30.00	30.00		
* Aerial Spray	Custom	9	60%	1	acre	9.50	5.70		
* Asana XL	Insecticide	9	60%	4.5	ounce	0.66	1.79		
Aerial Spray	Custom	10	100%	1	acre	9.50	9.50		
Copper	Fungicide	10	100%	2	pint	3.50	7.00		
Priaxor	Fungicide	10	100%	4	ounce	5.23	20.94		
Haul Grain (Dry Beans)	Custom	13	100%	25	cwt	0.28	7.00		
Scouting Dry Beans	Scouting		100%	1	acre	10.00	10.00		
Dry Beans	Crop Insurance					16.30	16.30		
Total Materials & Services								239.14	

* Mexican Bean Beetle and Western Bean Cutworm

Total listed costs for Field Operations and Materials and Services							412.48	
Interest on Operations Capital	\$ 351.53	cash expense @	5.50%	for 6.0 mo.			9.67	
Total Operating and Use Related Ownership Costs							422.15	
Overhead (accounting, liability insurance, vehicle cost, office expense)							20.00	
Real Estate Opportunity	Pivot (Panhandle)	\$ 3,625	per acre @	4.00%			145.00	
Real Estate Taxes		\$ 3,625	per acre @	1.00%			36.25	
Total Cost per Acre Including Overhead							623.40	
Cost per cwt							24.94	
Cash Cost per cwt							15.90	

**2016 Budget 37-Dry Beans, Direct Harvest, Conventional Tillage Using Pumped Water (25 cwt Actual Yield)
Pivot Irrigated, 800 GPM 35 PSI, 9 acre/inches**

Field Operations	Times or Qty	Unit	Labor @ \$20.00 /Hr	Fuel @ \$2.25 and Lube	Repairs		Ownership		Total	Your Estimate
					Power	Imp.	Power	Imp.		
1 Disk	2		4.03	3.93	0.58	2.49	8.29	2.41	21.73	
2 Chisel	1		1.98	1.93	0.75	2.02	2.49	1.57	10.74	
3 Spray	1		1.00	0.27	0.33	0.64	1.11	0.88	4.23	
4 Field Cultivation	1		1.47	1.41	0.56	1.28	1.84	1.57	8.13	
5 Plant	1		2.40	0.71	0.83	2.54	2.76	3.89	13.13	
6 Spray	0.6		0.60	0.16	0.20	0.38	0.66	0.53	2.53	
7 Row Crop Cultivation	1		2.00	0.82	0.76	0.44	2.51	1.64	8.17	
8 Pivot E 125' Lift	9	ai	6.25	25.08	2.63	14.53	4.77	8.69	61.95	
9 Aerial Spray	Custom									
10 Aerial Spray	Custom									
11 Spray	1		1.00	0.27	0.33	0.64	1.11	0.88	4.23	
12 Combine Irrigated Dry Beans with Draper Flex Platform	1		4.40	5.43	10.23	2.01	8.39	2.81	33.27	
13 Truck	Custom									
Total for Field Operations			25.13	40.01	17.20	26.97	33.93	24.87	168.11	

Materials & Services		Operation Index	Percent Acres Applied	Application		Applied Price	Total	Your Estimate
				Rate	Unit			
Outlook	Herbicide	3	100%	14	ounce	1.17	16.41	
Prowl H2O	Herbicide	3	100%	2	pint	6.50	13.00	
Edible Beans	Seed	5	100%	1	cwt	92.00	92.00	
10-34-0-1Z	Fertilizer	5	100%	7	gallon	2.85	19.95	
32-0-0	Fertilizer	5	100%	7	lbs N	0.47	3.29	
Raptor	Herbicide	6	60%	4	ounce	4.77	11.44	
Basagran	Herbicide	6	60%	1	pint	10.00	6.00	
NIS	Additive	6	60%	5	ounce	0.17	0.52	
UAN	Additive	6	60%	4	pint	0.21	0.50	
Electricity Fixed	Other	8	100%	1	acre	30.00	30.00	
* Aerial Spray	Custom	9	60%	1	acre	9.50	5.70	
* Asana XL	Insecticide	9	60%	4.5	ounce	0.66	1.79	
Aerial Spray	Custom	10	100%	1	acre	9.50	9.50	
Copper	Fungicide	10	100%	2	pint	3.50	7.00	
Priaxor	Fungicide	10	100%	4	ounce	5.23	20.94	
Gramoxone SL	Herbicide	11	100%	2	pint	5.38	10.75	
Haul Grain (Dry Beans)	Custom	13	100%	25	cwt	0.28	7.00	
Scouting Dry Beans	Scouting		100%	1	acre	10.00	10.00	
Dry Beans	Crop Insurance					16.30	16.30	
Total Materials & Services							282.09	

* Mexican Bean Beetle and Western Bean Cutworm

Total listed costs for Field Operations and Materials and Services		450.20
Interest on Operations Capital \$ 391.40 cash expense @ 5.50% for 6.0 mo.		10.76
Total Operating and Use Related Ownership Costs		460.96

Overhead (accounting, liability insurance, vehicle cost, office expense)		20.00
Real Estate Opportunity <input type="text" value="Pivot (Panhandle)"/> \$ 3,625 per acre @ 4.00%		145.00
Real Estate Taxes \$ 3,625 per acre @ 1.00%		36.25
Total Cost per Acre Including Overhead		662.21

Cost per cwt	26.49
Cash Cost per cwt	17.54

A potential yield loss of 92-120 pounds per acre (but can be as high as 240-480 pounds per acre) with direct harvest is possible because of beans lost on the lower stem. A draper flex platform is usually the best choice for direct harvest. Direct harvest reduces field operations and weather related losses while beans are drying in the windrow. Undercutting and windrowing has even resulted in total crop loss. In these budgets we have not adjusted dry bean yields because of different harvesting methods.