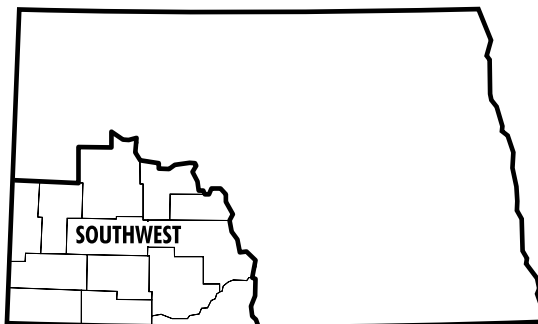




FARM MANAGEMENT PLANNING GUIDE

December 2015

Projected 2016 Crop Budgets



South West North Dakota

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The 2016 crop budgets provide an estimate of revenues and costs for selected crops. Each set of budgets are developed for a multi-county region. There is considerable variation in soil type and productivity, weather conditions, as well as management and production practices within each region. Therefore, **THESE BUDGETS ARE ONLY INTENDED TO BE USED AS A GUIDE. EVERY INDIVIDUAL IS HIGHLY ENCOURAGED TO DEVELOP HIS/HER OWN BUDGETS!**

The profitability budget accounts for full economic opportunity costs for land and machinery investment, regardless of farm operator equity position. The bottom line is the return to labor and management. This is the expected “payment” to the producer for the labor and managerial efforts required by the crop enterprise. Each individual must make the decision whether it is sufficient.

The budget can be changed to conform to the more common definition of accounting profit (return to unpaid labor and management, and owner equity) by

replacing the machinery investment and land charge cost items with your per acre interest and rental expense of machinery and land, and real estate tax if land is owned.

The budget can be used for long run decisions if the revenues and costs are realistic for several years. (Crop prices, direct costs, and the land charge are best estimates for only the 2016 crop year, but crop yields are historic averages and machinery ownership costs are an average for the total length of ownership). If the budget shows a high return to labor and management, and is representative for several years, increased acreage and corresponding investment should be considered. However, if long-run returns to labor and management are unsatisfactory the best decision may be to exit the crop enterprise and employ the machinery and land investment, and labor and management, in a different enterprise or investment.

For short-run planning decisions you can omit the indirect costs if the land and machinery required to produce the different enterprises are in place. Simply compare the crop enterprises by calculating return over direct costs. Labor requirements and risk should also be considered. Insurance is not available for some crops.

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North Dakota State University, Fargo, ND

The budget can be used to estimate cashflow by making a few modifications. Machinery depreciation should be omitted and the machinery investment number replaced with your per acre principal and interest payment on machinery debt. For owned land, the land charge should be replaced with your per acre real estate tax and principal and interest payment on land debt.

The 2014 Farm Bill initiated the Price Loss Coverage (PLC) and Agricultural Risk Coverage (ARC) support programs, and eliminated the direct and counter-cyclical payment programs and the ACRE program.

PLC and ARC payments have been omitted from the budgets because those payments, if any, are tied to historic farm program base acres, not to current crop selection or production.

Primary Assumptions:

Crops are planted on dryland recrop ground. Costs of moving crop to local market/storage are included.

The budgets for the South West, North West, South Central and North Central regions typically represent production systems where soil disturbance only occurs at seeding.

Market Price: Best estimates of NDSU extension economists. The greater of projected market price and marketing loan rate is used.

Market Yields: Average yield for the 7 year period 2008-2014, after the low and high yield years are removed. Yields for safflower, yellow mustard, buckwheat, millet, rye and chickpeas are from NDSU extension agronomists and industry sources.

Fertilizer: Cost of fertilizer applied, based on soil test, to meet yield goal of 130% of market yield. N fertilizer can be reduced if previous crop was soybean, dry bean, field peas or lentil.

Soil test - recrop:
 Nitrogen - 35 lb
 Phosphorus - 10 ppm
 Potassium - 356 ppm

Fertilizer prices:
 Nitrogen - .40/lb
 Phosphorus - .44/lb
 Potassium - .33/lb

Seed Prices:

Spring Wheat	9.25/bu
Durum	12.50/bu
Barley	8.50/bu
Corn GM	2.70/thou.kern.
Soybean RR2	.33/thou.kern.
Oil Sunflower	1.50/thou.kern.
Conf. Sunflower	2.50/thou.kern.
Canola	10.25/lb
Flax	14.50/bu
Field Peas	14.00/bu
Oats	6.00/bu
Lentils	.55/lb
Mustard	2.00/lb
Safflower	.60/lb
Buckwheat	.60/lb
Millet	.25/lb
Small Chickpeas	.55/lb
Winter Wheat	8.00/bu
Rye	8.00/bu

Fuel prices:

Diesel	1.80/gal
Gas	1.95/gal

Lubrication charge: 15% of fuel cost

Crop Insurance: Revenue Protection was used for all wheat, barley, soybeans, corn, canola, sunflowers and dry beans. Yield Protection or APH insurance was used for other crops. A 70% coverage and optional units were used, except corn for which 75% coverage and enterprise units were assumed.

Miscellaneous: soil testing, machinery rent and custom work.

Operating Interest: Direct costs charged 4.25% interest for 6 month period.

Misc. Overhead: Machinery housing and insurance at .5% and .85%, respectively, of average machinery investment. Also, liability insurance and license fees of trucks. In addition, \$3 per acre is assumed for general farm utilities, farm publications, meetings, dues, income tax preparation, legal fees, etc.

Land charge = average cash rent.

Machinery investment: 4.5% real interest rate, over the years of machine ownership, is charged on average machinery investment. The real, or inflation adjusted, rate is the commercial rate minus the inflation rate. Ave. mach. investment = (Purchase price + Disposal price)/2

Depreciation = (Purchase price - disposal price / years ownership)

Spring Wheat

Durum

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	36	_____	35	_____
Market Price	5.23	_____	5.96*	_____
MARKET INCOME	188.28	_____	208.60	_____
DIRECT COSTS				
-Seed	13.41	_____	21.88	_____
-Herbicides	25.20	_____	25.20	_____
-Fungicides**	5.00	_____	5.00	_____
-Insecticides***	0.00	_____	0.00	_____
-Fertilizer	41.06	_____	39.53	_____
-Crop Insurance	9.80	_____	11.20	_____
-Fuel & Lubrication	7.49	_____	7.46	_____
-Repairs	15.63	_____	15.61	_____
-Drying	0.00	_____	0.00	_____
-Miscellaneous	7.50	_____	7.50	_____
-Operating Interest	2.66	_____	2.83	_____
SUM OF LISTED DIRECT COSTS	127.75	=====	136.21	=====
INDIRECT (FIXED) COSTS				
-Misc. Overhead	6.52	_____	6.51	_____
-Machinery Depreciation	18.20	_____	18.17	_____
-Machinery Investment	9.88	_____	9.87	_____
-Land Investment	38.00	_____	38.00	_____
SUM OF LISTED INDIRECT COSTS	72.61	=====	72.54	=====
SUM OF ALL LISTED COSTS	200.36	_____	208.75	_____
RETURN TO LABOR & MANAGEMENT	(12.08)	_____	(0.15)	_____
LISTED COSTS PER BUDGET UNIT	(bu)		(bu)	
-Direct Costs	3.55	_____	3.89	_____
-Indirect Costs	2.02	_____	2.07	_____
-Total Costs	5.57	_____	5.96	_____

Wheat notes:

*Durum price is for milling quality. There is risk of lower quality and price.

**Includes seed treatment (\$1.50-\$2.00) and early season foliar fungicide (\$2-\$4.00). Although late season fungicides are often not warranted in this region, prothioconazole or metconazole containing products are highly recommended for fusarium head blight (scab) control when conditions are favorable for infection.

***Cereal grain aphid insecticide would cost about \$6.

Malting Barley

Corn Grain

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	53	_____	90	_____
Market Price	4.30*	_____	3.50	_____
MARKET INCOME	227.90	_____	315.00	_____
DIRECT COSTS				
-Seed	11.48	_____	62.10*	_____
-Herbicides	23.70	_____	21.00	_____
-Fungicides	5.00**	_____	0.00	_____
-Insecticides	0.00	_____	0.00	_____
-Fertilizer	35.98	_____	55.54	_____
-Crop Insurance	16.50	_____	13.70**	_____
-Fuel & Lubrication	7.94	_____	9.33	_____
-Repairs	15.97	_____	17.65	_____
-Drying	0.00	_____	18.90	_____
-Miscellaneous	7.50	_____	7.50	_____
-Operating Interest	2.64	_____	4.37	_____
SUM OF LISTED DIRECT COSTS	126.71	_____	210.09	_____
INDIRECT (FIXED) COSTS				
-Misc. Overhead	6.79	_____	8.27	_____
-Machinery Depreciation	18.84	_____	25.80	_____
-Machinery Investment	10.20	_____	14.10	_____
-Land Investment	38.00	_____	38.00	_____
SUM OF LISTED INDIRECT COSTS	73.82	_____	86.18	_____
SUM OF ALL LISTED COSTS	200.53	_____	296.28	_____
RETURN TO LABOR & MANAGEMENT	27.37	_____	18.72	_____
LISTED COSTS PER BUDGET UNIT	(bu)		(bu)	
-Direct Costs	2.39	_____	2.33	_____
-Indirect Costs	1.39	_____	0.96	_____
-Total Costs	3.78	_____	3.29	_____

Barley notes:

*There is risk of not making malting barley quality. Use \$2.90 price for feed barley quality.

**Includes seed treatment (\$1.50-\$2.00) and early season foliar fungicide (\$2-\$4.00). Late season fungicides, prothioconazole or metconazole containing products, for fusarium head blight (scab) control are recommended when conditions are favorable for infection.

Corn notes:

*GM corn with herbicide tolerance and above ground insect control traits.

Cost includes insecticide seed treatment for wireworm, rootworm, white grub and suppression of cutworm.

**Crop insurance only available by written agreement in some counties of region.

Soybeans

Oil Sunflower

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	24	_____	1410	_____
Market Price	7.85	_____	0.156	_____
MARKET INCOME	188.40	_____	219.96	_____
DIRECT COSTS				
-Seed	65.75*	_____	35.25	_____
-Herbicides	20.00	_____	33.20	_____
-Fungicides	0.00	_____	0.00*	_____
-Insecticides	0.00	_____	5.00**	_____
-Fertilizer	2.06	_____	29.52	_____
-Crop Insurance	14.30**	_____	13.40	_____
-Fuel & Lubrication	7.96	_____	7.99	_____
-Repairs	16.20	_____	16.67	_____
-Drying	0.00	_____	4.23	_____
-Miscellaneous	4.75	_____	15.50	_____
-Operating Interest	2.78	_____	3.42	_____
SUM OF LISTED DIRECT COSTS	133.80	=====	164.17	=====
INDIRECT (FIXED) COSTS				
-Misc. Overhead	6.66	_____	7.06	_____
-Machinery Depreciation	19.55	_____	20.54	_____
-Machinery Investment	10.74	_____	11.39	_____
-Land Investment	38.00	_____	38.00	_____
SUM OF LISTED INDIRECT COSTS	74.95	=====	76.99	=====
SUM OF ALL LISTED COSTS	208.75	_____	241.16	_____
RETURN TO LABOR & MANAGEMENT	(20.35)	_____	(21.20)	_____
LISTED COSTS PER BUDGET UNIT	(bu)		(lb)	
-Direct Costs	5.58	_____	0.12	_____
-Indirect Costs	3.12	_____	0.05	_____
-Total Costs	8.70	_____	0.17	_____

Soybean notes:

*RR2 (glyphosate) resistant soybeans. The cost includes \$8 for inoculant and fungicide treatment in addition to seed expense.

**Crop insurance only available by written agreement in some counties of region.

Oil Sunflower notes:

*Cost includes seed treatment for control of wireworm and flea beetle.

**Fungicide for rust would cost \$4 plus application.

***One spraying for head feeding insects (red seed weevil, lygus bug and banded moths). Custom application cost of \$8 is under "Miscellaneous." Foliar applied insecticide for cutworms would cost about \$5 plus application (usually tank mixed with herbicide).

Confection Sunflower

Canola

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	1340	_____	1500	_____
Market Price	0.212	_____	0.145	_____
MARKET INCOME	284.08	_____	217.50	_____
DIRECT COSTS				
-Seed	52.50	_____	51.25*	_____
-Herbicides	35.30	_____	21.30	_____
-Fungicides	0.00*	_____	0.00**	_____
-Insecticides	10.00**	_____	0.00	_____
-Fertilizer	27.36	_____	56.11	_____
-Crop Insurance	18.20	_____	13.80	_____
-Fuel & Lubrication	7.93	_____	7.27	_____
-Repairs	16.62	_____	15.47	_____
-Drying	4.02	_____	0.00	_____
-Miscellaneous	23.50	_____	7.50	_____
-Operating Interest	4.15	_____	3.67	_____
	=====	=====	=====	=====
SUM OF LISTED DIRECT COSTS	199.58	_____	176.37	_____
INDIRECT (FIXED) COSTS				
-Misc. Overhead	7.02	_____	6.40	_____
-Machinery Depreciation	20.46	_____	17.92	_____
-Machinery Investment	11.35	_____	9.73	_____
-Land Investment	38.00	_____	38.00	_____
	=====	=====	=====	=====
SUM OF LISTED INDIRECT COSTS	76.84	_____	72.05	_____
SUM OF ALL LISTED COSTS	276.42	_____	248.42	_____
RETURN TO LABOR & MANAGEMENT	7.66	_____	(30.92)	_____
LISTED COSTS PER BUDGET UNIT	(lb)		(lb)	
-Direct Costs	0.15	_____	0.12	_____
-Indirect Costs	0.06	_____	0.05	_____
-Total Costs	0.21	_____	0.17	_____

Confection Sunflower notes:

*Fungicide for rust would cost \$4 plus application.

**Two sprayings for head feeding insects (red seed weevil, lygus bug and banded moths) at about \$5 per application. Each custom application cost of \$8 is under

"Miscellaneous." Foliar applied insecticide for cutworms would cost about \$5 plus application (usually tank mixed with herbicide).

Canola notes:

*Cost includes insecticide seed treatment for flea beetles.

**Fungicide for white mold would cost about \$18 plus application.

Flax

Field Peas

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	20		32	
Market Price	7.88		6.42	
MARKET INCOME	157.60		205.44	
DIRECT COSTS				
-Seed	11.60		42.00	
-Herbicides	25.40		33.00	
-Fungicides	0.00		1.50	
-Insecticides	0.00		0.00*	
-Fertilizer	22.23		6.70	
-Crop Insurance	7.90		10.60	
-Fuel & Lubrication	7.48		8.49	
-Repairs	16.09		17.94	
-Drying	0.00		0.00	
-Miscellaneous	1.50		6.00	
-Operating Interest	1.96		2.68	
SUM OF LISTED DIRECT COSTS	94.16		128.91	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	6.52		7.00	
-Machinery Depreciation	18.35		21.47	
-Machinery Investment	10.40		11.61	
-Land Investment	38.00		38.00	
SUM OF LISTED INDIRECT COSTS	73.27		78.09	
SUM OF ALL LISTED COSTS	167.43		207.00	
RETURN TO LABOR & MANAGEMENT	(9.83)		(1.56)	
LISTED COSTS PER BUDGET UNIT	(bu)		(bu)	
-Direct Costs	4.71		4.03	
-Indirect Costs	3.66		2.44	
-Total Costs	8.37		6.47	

Field Pea notes:

For 2016, yellow and green peas are expected to have very similar returns and costs.

*Insecticide treatment for cutworms and/or pea aphids would cost about \$5 per acre plus application.

Oats

Lentils

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	60	_____	1310	_____
Market Price	2.27	_____	0.23	_____
MARKET INCOME	136.20	_____	301.30	_____
DIRECT COSTS				
-Seed	12.00	_____	38.50	_____
-Herbicides	9.80	_____	34.60*	_____
-Fungicides	0.00	_____	16.00**	_____
-Insecticides	0.00	_____	0.00***	_____
-Fertilizer	34.59	_____	4.57	_____
-Crop Insurance	9.60	_____	21.40	_____
-Fuel & Lubrication	8.83	_____	8.93	_____
-Repairs	16.92	_____	18.97	_____
-Drying	0.00	_____	0.00	_____
-Miscellaneous	7.50	_____	9.25	_____
-Operating Interest	2.11	_____	3.23	_____
	=====	=====	=====	=====
SUM OF LISTED DIRECT COSTS	101.36	_____	155.46	_____
INDIRECT (FIXED) COSTS				
-Misc. Overhead	7.29	_____	7.07	_____
-Machinery Depreciation	20.25	_____	22.17	_____
-Machinery Investment	11.64	_____	12.17	_____
-Land Investment	38.00	_____	38.00	_____
	=====	=====	=====	=====
SUM OF LISTED INDIRECT COSTS	77.18	_____	79.42	_____
SUM OF ALL LISTED COSTS	178.53	_____	234.88	_____
RETURN TO LABOR & MANAGEMENT	(42.33)	_____	66.42	_____
LISTED COSTS PER BUDGET UNIT	(bu)		(lb)	
-Direct Costs	1.69	_____	0.12	_____
-Indirect Costs	1.29	_____	0.06	_____
-Total Costs	2.98	_____	0.18	_____

Lentil notes:

*Includes pre-harvest dessicant.

**Fungicide treatment for ascochyta/anthracnose.

***Insecticide treatment for cutworms and/or grasshoppers would cost about \$5 per acre plus application.

Yellow Mustard

Safflower

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	800	_____	1050	_____
Market Price	0.31	_____	0.18	_____
MARKET INCOME	248.00	_____	189.00	_____
DIRECT COSTS				
-Seed	20.00	_____	10.80	_____
-Herbicides	20.10	_____	21.60	_____
-Fungicides	0.00	_____	18.00*	_____
-Insecticides	0.00	_____	0.00	_____
-Fertilizer	19.45	_____	19.31	_____
-Crop Insurance	20.00*	_____	10.40	_____
-Fuel & Lubrication	8.03	_____	7.57	_____
-Repairs	16.78	_____	16.26	_____
-Drying	0.00	_____	0.00	_____
-Miscellaneous	7.50	_____	7.50	_____
-Operating Interest	2.38	_____	2.37	_____
SUM OF LISTED DIRECT COSTS	114.24	=====	113.80	=====
INDIRECT (FIXED) COSTS				
-Misc. Overhead	6.82	_____	6.54	_____
-Machinery Depreciation	19.29	_____	18.55	_____
-Machinery Investment	11.61	_____	10.22	_____
-Land Investment	38.00	_____	38.00	_____
SUM OF LISTED INDIRECT COSTS	75.72	=====	73.30	=====
SUM OF ALL LISTED COSTS	189.96	_____	187.10	_____
RETURN TO LABOR & MANAGEMENT	58.04	_____	1.90	_____
LISTED COSTS PER BUDGET UNIT	(lb)		(lb)	
-Direct Costs	0.14	_____	0.11	_____
-Indirect Costs	0.09	_____	0.07	_____
-Total Costs	0.24	_____	0.18	_____

Yellow Mustard notes:

*Crop insurance is not available in some counties of the region.

Safflower notes:

*Fungicide for alternaria leaf spot.

Buckwheat

Millet

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	850		1400	
Market Price	0.219		0.065	
MARKET INCOME	186.15		91.00	
DIRECT COSTS				
-Seed	30.00		6.25	
-Herbicides	18.10		9.70	
-Fungicides	0.00		0.00	
-Insecticides	0.00		0.00	
-Fertilizer	11.22		16.36	
-Crop Insurance	9.30*		0.00	
-Fuel & Lubrication	7.74		7.98	
-Repairs	16.09		16.28	
-Drying	0.00		0.00	
-Miscellaneous	1.50		7.50	
-Operating Interest	2.00		1.36	
SUM OF LISTED DIRECT COSTS	95.95		65.43	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	6.65		6.79	
-Machinery Depreciation	18.72		19.06	
-Machinery Investment	10.88		11.05	
-Land Investment	38.00		38.00	
SUM OF LISTED INDIRECT COSTS	74.25		74.90	
SUM OF ALL LISTED COSTS	170.20		140.33	
RETURN TO LABOR & MANAGEMENT	15.95		(49.33)	
LISTED COSTS PER BUDGET UNIT				
	(lb)		(lb)	
-Direct Costs	0.11		0.05	
-Indirect Costs	0.09		0.05	
-Total Costs	0.20		0.10	

Buckwheat notes:

*Crop insurance is not available in most counties of the region.

Small Chickpea* Winter Wheat

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	1400		43*	
Market Price	0.25		4.42	
MARKET INCOME	350.00		190.06	
DIRECT COSTS				
-Seed	66.00		8.50	
-Herbicides	35.40		22.40	
-Fungicides	36.00**		9.00	
-Insecticides	0.00		0.00	
-Fertilizer	7.99		51.76	
-Crop Insurance	17.40		10.20	
-Fuel & Lubrication	10.25		7.54	
-Repairs	22.22		15.80	
-Drying	0.00		0.00	
-Miscellaneous	8.25		7.50	
-Operating Interest	4.32		2.82	
SUM OF LISTED DIRECT COSTS	207.83		135.52	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	7.75		6.55	
-Machinery Depreciation	26.72		18.23	
-Machinery Investment	14.41		9.73	
-Land Investment	38.00		38.00	
SUM OF LISTED INDIRECT COSTS	86.88		72.50	
SUM OF ALL LISTED COSTS	294.71		208.02	
RETURN TO LABOR & MANAGEMENT	55.29		(17.96)	
LISTED COSTS PER BUDGET UNIT				
	(lb)		(bu)	
-Direct Costs	0.15		3.15	
-Indirect Costs	0.06		1.69	
-Total Costs	0.21		4.84	

Small Chickpea notes:

*A kabula variety with medium size seed, about 7-8mm, which has better ascochyta resistance than large kabula's.

**Two fungicide treatments for ascochyta blight. Additional treatments may be necessary.

Winter Wheat notes:

*Yield is per harvested acre. There is some risk of acreage abandonment in spring.

Rye

	Per Acre	Your Figures
Market Yield	39	_____
Market Price	4.23	_____
MARKET INCOME	164.97	_____
DIRECT COSTS		
-Seed	9.60	_____
-Herbicides	6.50	_____
-Fungicides	0.00	_____
-Insecticides	0.00	_____
-Fertilizer	45.65	_____
-Crop Insurance	10.00	_____
-Fuel & Lubrication	7.27	_____
-Repairs	14.89	_____
-Drying	0.00	_____
-Miscellaneous	7.50	_____
-Operating Interest	2.15	_____
	=====	=====
SUM OF LISTED DIRECT COSTS	103.56	_____
INDIRECT (FIXED) COSTS		
-Misc. Overhead	6.42	_____
-Machinery Depreciation	17.66	_____
-Machinery Investment	9.45	_____
-Land Investment	38.00	_____
	=====	=====
SUM OF LISTED INDIRECT COSTS	71.54	_____
SUM OF ALL LISTED COSTS	175.10	_____
RETURN TO LABOR & MANAGEMENT	(10.13)	_____
LISTED COSTS PER BUDGET UNIT	(bu)	
-Direct Costs	2.66	_____
-Indirect Costs	1.83	_____
-Total Costs	4.49	_____

2016 Machinery List

Machine	Purch. Price	Annual Use	Years to trade	Trade in	Deprec.	Invest.	Repairs	Ac/hr
FWA 140HP Tractor	130000	400 hr	20	40676	11.17 /hr	9.60 /hr	12.84 /hr	
FWA 180HP Tractor	176200	500 hr	15	50575	16.75 /hr	10.20 /hr	17.40 /hr	
4WD 340HP Tractor	232100	500 hr	15	66661	22.06 /hr	13.44 /hr	13.11 /hr	
SP Combine (base unit)	281900	250 hr	12	68074	71.28 /hr	31.50 /hr	44.43 /hr	
Tandem Truck (used)	38300	150 hr	15	12200	11.60 /hr	7.58 /hr	7.85 /hr	
Semi & Trailer (used)	42900	150 hr	10	12250	20.43 /hr	8.27 /hr	9.47 /hr	
Pick-up Truck	30600	300 hr	10	6000	8.20 /hr	2.75 /hr	3.55 /hr	
Swather 30 ft	30600	1000 ac	20	7253	1.17 /ac	0.85 /ac	0.49 /ac	13.1
Sprayer 90 ft	38800	5000 ac	10	19278	0.39 /ac	0.26 /ac	0.50 /ac	42.5
Heavy Harrow 70 ft	31000	2000 ac	20	18080	0.32 /ac	0.55 /ac	0.35 /ac	39.7
Air Seeder 40 ft	180800	2400 ac	10	92386	3.68 /ac	2.56 /ac	6.25 /ac	17.0
Planter 12-30	67700	800 ac	20	22530	2.82 /ac	2.54 /ac	3.74 /ac	10.6
Corn head	58600	800 ac	12	16808	4.35 /ac	2.12 /ac	1.36 /ac	6.8
Grain head w/pu	15600	800 ac	20	1536	0.88 /ac	0.48 /ac	0.25 /ac	10.2
Grain str. cut 30 ft	26000	2000 ac	8	10508	0.97 /ac	0.41 /ac	0.40 /ac	10.2
Flex head 30 ft	38600	1000 ac	20	3541	1.75 /ac	0.95 /ac	0.60 /ac	10.2
Head w/drybean pickups	31300	400 ac	20	3334	3.50 /ac	1.95 /ac	0.56 /ac	8.9
Rock picker	22300	50 hr	20	7122	0.51 /ac	0.44 /ac	0.33 /ac	29.1
Grain auger	12700	50 hr	20	735	11.97 /hr	6.05 /hr	4.70 /hr	

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