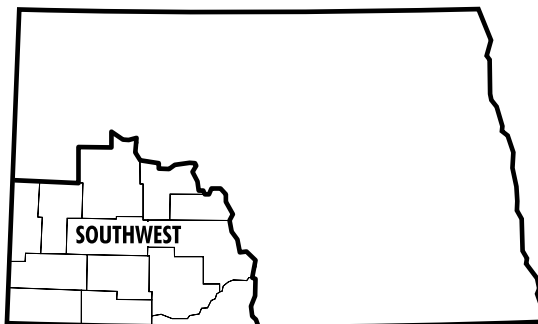




FARM MANAGEMENT PLANNING GUIDE

December 2014

Projected 2015 Crop Budgets



South West North Dakota

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The 2015 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 2015 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 2007-2013, 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 - .46/lb
 Phosphorus - .45/lb
 Potassium - .38/lb

Seed Prices:

Spring Wheat	11.00/bu
Durum	18.50/bu
Barley	9.00/bu
Corn grain RR/Bt	2.70/thou.kern.
Soybean RR2	.35/thou.kern.
Oil Sunflower	1.50/thou.kern.
Conf. Sunflower	2.50/thou.kern.
Canola	10.25/lb
Flax	18.00/bu
Field Peas	12.75/bu
Oats	6.00/bu
Lentils	.40/lb
Mustard	1.70/lb
Safflower	.65/lb
Buckwheat	.62/lb
Millet	.30/lb
Small Chickpeas	.55/lb
Winter Wheat	10.50/bu
Rye	9.50/bu

Fuel prices:

Diesel	2.95/gal
Gas	2.60/gal

Lubrication charge: 15% of fuel cost

Crop Insurance: Coverage levels are 70% on all insurable crops. Yield Protection or APH insurance estimates are used, except for Revenue Protection on all wheat, barley, soybeans, corn, canola, sunflowers and dry beans.

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	33	_____	33	_____
Market Price	5.92	_____	6.95*	_____
MARKET INCOME	195.36	_____	229.35	_____
DIRECT COSTS				
-Seed	14.85	_____	30.53	_____
-Herbicides	25.20	_____	25.20	_____
-Fungicides**	5.50	_____	5.50	_____
-Insecticides***	0.00	_____	0.00	_____
-Fertilizer	40.98	_____	40.98	_____
-Crop Insurance	11.30	_____	13.30	_____
-Fuel & Lubrication	11.80	_____	11.80	_____
-Repairs	15.34	_____	15.34	_____
-Drying	0.00	_____	0.00	_____
-Miscellaneous	7.50	_____	7.50	_____
-Operating Interest	2.81	_____	3.19	_____
SUM OF LISTED DIRECT COSTS	135.28	=====	153.33	=====
INDIRECT (FIXED) COSTS				
-Misc. Overhead	6.38	_____	6.38	_____
-Machinery Depreciation	17.80	_____	17.80	_____
-Machinery Investment	9.68	_____	9.68	_____
-Land Charge	38.50	_____	38.50	_____
SUM OF LISTED INDIRECT COSTS	72.36	=====	72.36	=====
SUM OF ALL LISTED COSTS	207.65	_____	225.70	_____
RETURN TO LABOR & MANAGEMENT	(12.29)	_____	3.65	_____
LISTED COSTS PER BUDGET UNIT	(bu)		(bu)	
-Direct Costs	4.10	_____	4.65	_____
-Indirect Costs	2.19	_____	2.19	_____
-Total Costs	6.29	_____	6.84	_____

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-\$4.50). Although late season fungicides are often not warranted in this region, prothioconazole or metconazole containing products (about \$12) 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	51	_____	85	_____
Market Price	4.76*	_____	3.50	_____
MARKET INCOME	242.76	_____	297.50	_____
DIRECT COSTS				
-Seed	12.15	_____	59.40*	_____
-Herbicides	23.70	_____	21.00	_____
-Fungicides	5.50**	_____	0.00	_____
-Insecticides	0.00	_____	0.00	_____
-Fertilizer	38.15	_____	57.82	_____
-Crop Insurance	15.20	_____	29.20**	_____
-Fuel & Lubrication	12.58	_____	14.74	_____
-Repairs	15.70	_____	17.30	_____
-Drying	0.00	_____	17.85	_____
-Miscellaneous	7.50	_____	7.50	_____
-Operating Interest	2.77	_____	4.78	_____
	=====	=====	=====	=====
SUM OF LISTED DIRECT COSTS	133.26	_____	229.59	_____
INDIRECT (FIXED) COSTS				
-Misc. Overhead	6.66	_____	8.09	_____
-Machinery Depreciation	18.46	_____	25.24	_____
-Machinery Investment	10.01	_____	13.81	_____
-Land Charge	38.50	_____	38.50	_____
	=====	=====	=====	=====
SUM OF LISTED INDIRECT COSTS	73.63	_____	85.63	_____
SUM OF ALL LISTED COSTS	206.89	_____	315.23	_____
RETURN TO LABOR & MANAGEMENT	35.87	_____	(17.73)	_____
LISTED COSTS PER BUDGET UNIT	(bu)		(bu)	
-Direct Costs	2.61	_____	2.70	_____
-Indirect Costs	1.44	_____	1.01	_____
-Total Costs	4.06	_____	3.71	_____

Barley notes:

*Use \$2.94 estimate for feed barley price.

**Includes seed treatment (\$1.50-\$2.00) and early season foliar fungicide (\$2-\$4.50). Late season fungicides, prothioconazole or metconazole containing products, for fusarium head blight (scab) control are recommended when conditions are favorable for infection.

Corn notes:

*RR/Bt corn. 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.

Oil Soybeans Sunflower

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	23		1440	
Market Price	8.85		0.176	
MARKET INCOME	203.55		253.44	
DIRECT COSTS				
-Seed	69.25*		35.25*	
-Herbicides	20.00		33.20	
-Fungicides	0.00		0.00**	
-Insecticides	0.00		7.00***	
-Fertilizer	2.02		34.12	
-Crop Insurance	14.20**		12.70	
-Fuel & Lubrication	12.63		12.79	
-Repairs	15.94		16.45	
-Drying	0.00		4.32	
-Miscellaneous	4.75		15.50	
-Operating Interest	2.95		3.64	
SUM OF LISTED DIRECT COSTS	141.74		174.96	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	6.54		6.97	
-Machinery Depreciation	19.19		20.25	
-Machinery Investment	10.55		11.24	
-Land Charge	38.50		38.50	
SUM OF LISTED INDIRECT COSTS	74.79		76.96	
SUM OF ALL LISTED COSTS	216.53		251.91	
RETURN TO LABOR & MANAGEMENT	(12.98)		1.53	
LISTED COSTS PER BUDGET UNIT	(bu)		(lb)	
-Direct Costs	6.16		0.12	
-Indirect Costs	3.25		0.05	
-Total Costs	9.41		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." Insecticide treatment for cutworms would cost about \$5 plus application (usually tank mixed with herbicide).

Confectionery Sunflower

Canola

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	1370		1400	
Market Price	0.247		0.168	
MARKET INCOME	338.39		235.20	
DIRECT COSTS				
-Seed	52.50*		51.25*	
-Herbicides	35.30		20.70	
-Fungicides	0.00**		0.00**	
-Insecticides	14.00***		0.00	
-Fertilizer	31.68		57.18	
-Crop Insurance	16.60		10.80	
-Fuel & Lubrication	12.69		11.49	
-Repairs	16.40		15.21	
-Drying	4.11		0.00	
-Miscellaneous	23.50		7.50	
-Operating Interest	4.39		3.70	
	=====	=====	=====	=====
SUM OF LISTED DIRECT COSTS	211.17		177.83	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	6.94		6.28	
-Machinery Depreciation	20.17		17.56	
-Machinery Investment	11.20		9.55	
-Land Charge	38.50		38.50	
	=====	=====	=====	=====
SUM OF LISTED INDIRECT COSTS	76.80		71.89	
SUM OF ALL LISTED COSTS	287.98		249.72	
RETURN TO LABOR & MANAGEMENT	50.41		(14.52)	
LISTED COSTS PER BUDGET UNIT				
	(lb)		(lb)	
-Direct Costs	0.15		0.13	
-Indirect Costs	0.06		0.05	
-Total Costs	0.21		0.18	

Confectionery Sunflower notes:

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

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

***Two sprayings for head feeding insects (red seed weevil, lygus bug and banded moths) at about \$7 per application. Each custom application cost of \$8 is under "Miscellaneous." Insecticide treatment 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	19		31	
Market Price	11.33		6.30*	
MARKET INCOME	215.27		195.30	
DIRECT COSTS				
-Seed	12.60		38.25**	
-Herbicides	25.40		31.75	
-Fungicides	0.00		1.50	
-Insecticides	0.00		0.00***	
-Fertilizer	22.88		6.64	
-Crop Insurance	8.90		8.60	
-Fuel & Lubrication	11.87		13.52	
-Repairs	15.84		17.66	
-Drying	0.00		0.00	
-Miscellaneous	1.50		6.00	
-Operating Interest	2.10		2.63	
SUM OF LISTED DIRECT COSTS	101.08		126.55	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	6.41		6.88	
-Machinery Depreciation	18.03		21.10	
-Machinery Investment	10.22		11.42	
-Land Charge	38.50		38.50	
SUM OF LISTED INDIRECT COSTS	73.15		77.90	
SUM OF ALL LISTED COSTS	174.24		204.45	
RETURN TO LABOR & MANAGEMENT	41.03		(9.15)	
LISTED COSTS PER BUDGET UNIT				
	(bu)		(bu)	
-Direct Costs	5.32		4.08	
-Indirect Costs	3.85		2.51	
-Total Costs	.17		6.60	

Field Pea notes:

*Yellow pea food quality price. Use \$7.80 for green pea food quality and about \$4.00 for feed quality peas.

**Yellow pea seed cost, use \$47 per acre for green peas.

**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	56	_____	1310	_____
Market Price	2.47	_____	0.23	_____
MARKET INCOME	138.32	_____	301.30	_____
DIRECT COSTS				
-Seed	12.00	_____	28.00	_____
-Herbicides	9.80	_____	36.40*	_____
-Fungicides	0.00	_____	0.00**	_____
-Insecticides	0.00	_____	0.00***	_____
-Fertilizer	35.10	_____	4.67	_____
-Crop Insurance	10.70	_____	17.10	_____
-Fuel & Lubrication	13.96	_____	14.30	_____
-Repairs	16.60	_____	18.70	_____
-Drying	0.00	_____	0.00	_____
-Miscellaneous	7.50	_____	9.25	_____
-Operating Interest	2.25	_____	2.73	_____
SUM OF LISTED DIRECT COSTS	107.90	=====	131.15	=====
INDIRECT (FIXED) COSTS				
-Misc. Overhead	7.12	_____	6.96	_____
-Machinery Depreciation	19.79	_____	21.82	_____
-Machinery Investment	11.39	_____	11.99	_____
-Land Charge	38.50	_____	38.50	_____
SUM OF LISTED INDIRECT COSTS	76.81	=====	79.28	=====
SUM OF ALL LISTED COSTS	184.70	_____	210.42	_____
RETURN TO LABOR & MANAGEMENT	(46.38)	_____	90.88	_____
LISTED COSTS PER BUDGET UNIT	(bu)		(lb)	
-Direct Costs	1.93	_____	0.10	_____
-Indirect Costs	1.37	_____	0.06	_____
-Total Costs	3.30	_____	0.16	_____

Lentil notes:

*Includes pre-harvest dessicant.

**Fungicide treatment for ascochyta/anthracnose would cost about \$16 plus application.

***Insecticide treatment for cutworms 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	0.298	_____	0.24	_____
MARKET INCOME	238.40	_____	252.00	_____
DIRECT COSTS				
-Seed	17.00	_____	11.70	_____
-Herbicides	20.10	_____	21.60	_____
-Fungicides	0.00	_____	18.00*	_____
-Insecticides	0.00	_____	0.00	_____
-Fertilizer	21.55	_____	21.44	_____
-Crop Insurance	15.70*	_____	9.70	_____
-Fuel & Lubrication	12.82	_____	12.05	_____
-Repairs	16.54	_____	16.02	_____
-Drying	0.00	_____	0.00	_____
-Miscellaneous	7.50	_____	7.50	_____
-Operating Interest	2.36	_____	2.51	_____
SUM OF LISTED DIRECT COSTS	113.57	=====	120.52	=====
INDIRECT (FIXED) COSTS				
-Misc. Overhead	6.72	_____	6.44	_____
-Machinery Depreciation	18.99	_____	18.25	_____
-Machinery Investment	11.43	_____	10.06	_____
-Land Charge	38.50	_____	38.50	_____
SUM OF LISTED INDIRECT COSTS	75.65	=====	73.25	=====
SUM OF ALL LISTED COSTS	189.21	_____	193.78	_____
RETURN TO LABOR & MANAGEMENT	49.19	_____	58.22	_____
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	0.249	_____	0.075	_____
MARKET INCOME	211.65	_____	105.00	_____
DIRECT COSTS				
-Seed	31.00	_____	7.50	_____
-Herbicides	18.10	_____	9.70	_____
-Fungicides	0.00	_____	0.00	_____
-Insecticides	0.00	_____	0.00	_____
-Fertilizer	12.27	_____	18.20	_____
-Crop Insurance	10.70*	_____	0.00	_____
-Fuel & Lubrication	12.34	_____	12.74	_____
-Repairs	15.86	_____	16.04	_____
-Drying	0.00	_____	0.00	_____
-Miscellaneous	1.50	_____	7.50	_____
-Operating Interest	2.16	_____	1.52	_____
SUM OF LISTED DIRECT COSTS	103.94	=====	73.20	=====
INDIRECT (FIXED) COSTS				
-Misc. Overhead	6.55	_____	6.69	_____
-Machinery Depreciation	18.42	_____	18.76	_____
-Machinery Investment	10.72	_____	10.88	_____
-Land Charge	38.50	_____	38.50	_____
SUM OF LISTED INDIRECT COSTS	74.20	=====	74.84	=====
SUM OF ALL LISTED COSTS	178.13	_____	148.03	_____
RETURN TO LABOR & MANAGEMENT	33.52	_____	(43.03)	_____
LISTED COSTS PER BUDGET UNIT	(lb)		(lb)	
-Direct Costs	0.12	_____	0.05	_____
-Indirect Costs	0.09	_____	0.05	_____
-Total Costs	0.21	_____	0.11	_____

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	_____	41*	_____
Market Price	0.25	_____	5.41	_____
MARKET INCOME	350.00	_____	221.81	_____
DIRECT COSTS				
-Seed	66.00	_____	10.50	_____
-Herbicides	35.40	_____	22.40	_____
-Fungicides	36.00**	_____	9.00	_____
-Insecticides	0.00	_____	0.00	_____
-Fertilizer	8.26	_____	54.81	_____
-Crop Insurance	14.50	_____	11.90	_____
-Fuel & Lubrication	16.46	_____	11.92	_____
-Repairs	21.89	_____	15.53	_____
-Drying	0.00	_____	0.00	_____
-Miscellaneous	8.25	_____	7.50	_____
-Operating Interest	4.39	_____	3.05	_____
SUM OF LISTED DIRECT COSTS	211.16	=====	146.61	=====
INDIRECT (FIXED) COSTS				
-Misc. Overhead	7.64	_____	6.42	_____
-Machinery Depreciation	26.30	_____	17.86	_____
-Machinery Investment	14.19	_____	9.54	_____
-Land Charge	38.50	_____	38.50	_____
SUM OF LISTED INDIRECT COSTS	86.64	=====	72.33	=====
SUM OF ALL LISTED COSTS	297.79	_____	218.94	_____
RETURN TO LABOR & MANAGEMENT	52.21	_____	2.87	_____
LISTED COSTS PER BUDGET UNIT	(lb)		(bu)	
-Direct Costs	0.15	_____	3.58	_____
-Indirect Costs	0.06	_____	1.76	_____
-Total Costs	0.21	_____	5.34	_____

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	38	_____
Market Price	5.87	_____
MARKET INCOME	223.06	_____
DIRECT COSTS		
-Seed	11.40	_____
-Herbicides	6.50	_____
-Fungicides	0.00	_____
-Insecticides	0.00	_____
-Fertilizer	49.62	_____
-Crop Insurance	17.50	_____
-Fuel & Lubrication	11.52	_____
-Repairs	14.66	_____
-Drying	0.00	_____
-Miscellaneous	7.50	_____
-Operating Interest	2.52	_____
	=====	=====
SUM OF LISTED DIRECT COSTS	121.23	_____
INDIRECT (FIXED) COSTS		
-Misc. Overhead	6.31	_____
-Machinery Depreciation	17.35	_____
-Machinery Investment	9.29	_____
-Land Charge	38.50	_____
	=====	=====
SUM OF LISTED INDIRECT COSTS	71.45	_____
SUM OF ALL LISTED COSTS	192.68	_____
RETURN TO LABOR & MANAGEMENT	30.38	_____
LISTED COSTS PER BUDGET UNIT	(bu)	
-Direct Costs	3.19	_____
-Indirect Costs	1.88	_____
-Total Costs	5.07	_____

2015 Machinery List

Machine	Purch. Price	Annual Use	Years to trade	Trade in	Deprec.	Invest.	Repairs	Ac/hr
FWA 140HP Tractor	128100	400 hr	20	40090	11.00 /hr	9.46 /hr	12.66 /hr	
FWA 180HP Tractor	173600	500 hr	15	49843	16.50 /hr	10.05 /hr	17.15 /hr	
4WD 340HP Tractor	228700	500 hr	15	65685	21.74 /hr	13.25 /hr	12.92 /hr	
SP Combine (base unit)	277800	250 hr	12	67068	70.24 /hr	31.04 /hr	43.77 /hr	
Tandem Truck (used)	37700	150 hr	15	12000	11.42 /hr	7.46 /hr	7.73 /hr	
Semi & Trailer (used)	42300	150 hr	10	12100	20.13 /hr	8.16 /hr	9.33 /hr	
Pick-up Truck	29800	300 hr	10	5900	7.97 /hr	2.68 /hr	3.50 /hr	
Swather 30 ft	30200	1000 ac	20	7152	1.15 /ac	0.84 /ac	0.49 /ac	13.1
Sprayer 90 ft	38200	5000 ac	10	19024	0.38 /ac	0.26 /ac	0.49 /ac	42.5
Heavy Harrow 70 ft	30600	2000 ac	20	17837	0.32 /ac	0.55 /ac	0.34 /ac	39.7
Air Seeder 40 ft	178100	2400 ac	10	91039	3.62 /ac	2.52 /ac	6.16 /ac	17.0
Planter 12-30	66700	800 ac	20	22191	2.78 /ac	2.50 /ac	3.68 /ac	10.6
Corn head	57800	800 ac	12	16565	4.29 /ac	2.09 /ac	1.34 /ac	6.8
Grain head w/pu	15400	800 ac	20	1511	0.87 /ac	0.47 /ac	0.24 /ac	10.2
Grain str. cut 30 ft	25600	2000 ac	8	10336	0.95 /ac	0.40 /ac	0.40 /ac	10.2
Head w/sunf pans 30 ft	30800	600 ac	20	3148	2.30 /ac	1.27 /ac	0.48 /ac	10.2
Flex head 30 ft	38000	1000 ac	20	3486	1.72 /ac	0.93 /ac	0.59 /ac	10.2
Rock picker	22000	50 hr	20	7013	0.50 /ac	0.44 /ac	0.33 /ac	29.1
Grain auger	12500	50 hr	20	725	11.78 /hr	5.95 /hr	4.70 /hr	

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