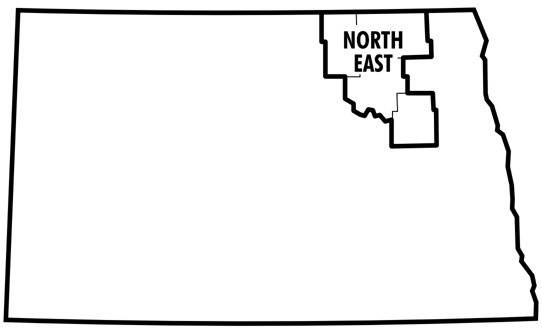
FARM MANAGEMENT
PLANNING GUIDE

December 2012

Projected 2013 Crop Budgets



North East North Dakota

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The 2013 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 2013 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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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.

Currently, a Farm Bill has not been authorized. **Direct and counter-cyclical payments** have been omitted from the budgets because those payments are tied to historic farm program base acres and payment yields, not to current crop selection or production. Direct payments for this region have been $11.50 per acre when averaged over all crop acreage. No payments from counter-cyclical type programs are expected with the price levels used in the budgets.

Primary Assumptions:

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

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 2005-2011, 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	- 33 lb
Phosphorus	- 6 ppm
Potassium	- 248 ppm

Fertilizer prices:

Nitrogen	- .58/lb
Phosphorus	- .52/lb
Potassium	- .48/lb

Seed Prices:

Spring Wheat	13.20/bu
Durum	12.25/bu
Barley	11.00/bu
Corn grain RR/Bt	2.90/thou.kern.
Corn grain RR	2.60/thou.kern.
Soybean RR2	.37/thou.kern.
Dry Beans	.88/lb
Oil Sunflower	1.38/thou.kern.
Conf. Sunflower	2.42/thou.kern.
Canola	9.40/lb
Flax	18.00/bu
Field Peas	14.50/bu
Oats	6.50/bu
Mustard	1.70/lb
Buckwheat	.67/lb
Millet	.55/lb
Winter Wheat	11.25/bu

Fuel prices:

Diesel	3.40/gal
Gas	3.20/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, corn, soybeans, corn, canola and sunflowers.

Miscellaneous: soil testing, machinery rent and custom work.

Operating Interest: Direct costs charged 4.60% 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	43	____________	40	____________
Market Price	8.79	____________	9.02*	____________
MARKET INCOME	377.97	____________	360.80	____________
DIRECT COSTS				
-Seed	23.10	____________	24.50	____________
-Herbicides	21.00	____________	21.00	____________
-Fungicides**	5.50	____________	5.50	____________
-Insecticides***	0.00	____________	0.00	____________
-Fertilizer	81.36	____________	74.35	____________
-Crop Insurance	21.40	____________	20.60	____________
-Fuel & Lubrication	19.82	____________	19.59	____________
-Repairs	17.33	____________	17.25	____________
-Drying	0.00	____________	0.00	____________
-Miscellaneous	1.50	____________	1.50	____________
-Operating Interest	4.39	____________	4.24	____________
	========	============	========	============
SUM OF LISTED DIRECT COSTS	195.40	____________	188.53	____________
INDIRECT (FIXED) COSTS				
-Misc. Overhead	6.95	____________	6.90	____________
-Machinery Depreciation	20.31	____________	20.17	____________
-Machinery Investment	11.79	____________	11.71	____________
-Land Charge	51.70	____________	51.70	____________
	========	============	========	============
SUM OF LISTED INDIRECT COSTS	90.74	____________	90.48	____________
SUM OF ALL LISTED COSTS	286.15	____________	279.01	____________
RETURN TO LABOR & MANAGEMENT	91.82	____________	81.79	____________
LISTED COSTS PER BUDGET UNIT	(bu):		(bu):	
-Direct Costs	4.54	____________	4.71	____________
-Indirect Costs	2.11	____________	2.26	____________
-Total Costs	6.65	____________	6.98	____________

Wheat notes:
*Durum price is for milling quality. There is high risk of lower quality and lower price.
**Includes seed treatment ($1.50-$2.00) and early season foliar fungicide ($2-$4.50). Late season fungicides are often warranted in this region. For fusarium head blight (scab) control, prothioconazole or metconazole containing products are highly recommended when a more susceptable cultivar is grown and/or when conditions are favorable for infection.
***Wheat midge insecticide would cost about $6. Cereal grain aphid insecticide would cost about $6.

	Malting Barley		Corn Grain	
	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	63	____________	103	____________
Market Price	6.40*	____________	5.43	____________
MARKET INCOME	403.20	____________	559.29	____________
DIRECT COSTS				
-Seed	22.00	____________	80.94*	____________
-Herbicides	17.80	____________	17.50	____________
-Fungicides	5.50**	____________	0.00	____________
-Insecticides	0.00	____________	0.00	____________
-Fertilizer	72.77	____________	104.41	____________
-Crop Insurance	18.00	____________	45.10	____________
-Fuel & Lubrication	23.21	____________	29.06	____________
-Repairs	19.12	____________	22.60	____________
-Drying	0.00	____________	20.60	____________
-Miscellaneous	1.50	____________	1.50	____________
-Operating Interest	4.14	____________	7.40	____________
	========	============	========	============
SUM OF LISTED DIRECT COSTS	184.04	____________	329.11	____________
INDIRECT (FIXED) COSTS				
-Misc. Overhead	7.72	____________	9.44	____________
-Machinery Depreciation	23.10	____________	32.16	____________
-Machinery Investment	13.70	____________	18.37	____________
-Land Charge	51.70	____________	51.70	____________
	========	============	========	============
SUM OF LISTED INDIRECT COSTS	96.21	____________	111.67	____________
SUM OF ALL LISTED COSTS	280.25	____________	440.78	____________
RETURN TO LABOR & MANAGEMENT	122.95	____________	118.51	____________
LISTED COSTS PER BUDGET UNIT	(bu):		(bu):	
-Direct Costs	2.92	____________	3.20	____________
-Indirect Costs	1.53	____________	1.08	____________
-Total Costs	4.45	____________	4.28	____________

Barley notes:
*On average, about 50% of production is feed quality. Use $4.75 estimate for feed barley price.
**Includes seed treatment ($1.50-$2.00) and early season foliar fungicide ($2-$4.50).

Corn notes:
*RR/Bt corn and RR corn without Bt Trait for corn borer refuge. Cost includes insecticide seed treatment for wireworm, rootworm, white grub and suppression of cutworm.

	Soybeans Per Acre	Soybeans Your Figures	Drybeans* Per Acre	Drybeans* Your Figures
Market Yield	28	____________	1420	____________
Market Price	12.45	____________	0.32	____________
MARKET INCOME	348.60	____________	454.40	____________
DIRECT COSTS				
-Seed	64.75*	____________	44.00	____________
-Herbicides	17.50	____________	44.00**	____________
-Fungicides	0.00	____________	20.00***	____________
-Insecticides	7.00**	____________	0.00	____________
-Fertilizer	13.44	____________	48.35	____________
-Crop Insurance	25.20	____________	35.90	____________
-Fuel & Lubrication	20.29	____________	23.12	____________
-Repairs	18.80	____________	21.45	____________
-Drying	0.00	____________	0.00	____________
-Miscellaneous	7.25	____________	12.25	____________
-Operating Interest	4.01	____________	5.73	____________
	========	============	========	============
SUM OF LISTED DIRECT COSTS	178.23	____________	254.79	____________
INDIRECT (FIXED) COSTS				
-Misc. Overhead	7.15	____________	7.79	____________
-Machinery Depreciation	21.80	____________	26.43	____________
-Machinery Investment	12.94	____________	15.21	____________
-Land Charge	51.70	____________	51.70	____________
	========	============	========	============
SUM OF LISTED INDIRECT COSTS	93.59	____________	101.13	____________
SUM OF ALL LISTED COSTS	271.82	____________	355.92	____________
RETURN TO LABOR & MANAGEMENT	76.78	____________	98.48	____________
LISTED COSTS PER BUDGET UNIT	(bu):		(lb):	
-Direct Costs	6.37	____________	0.18	____________
-Indirect Costs	3.34	____________	0.07	____________
Total Costs	9.71	____________	0.25	____________

Soybean notes:
*RR2 (glyphosate) resistant soybeans. Insecticide and fungicide seed treatment would cost about $11 per acre.
**Soybean aphid and/or spider mite insecticide

Drybean notes:
*Acreage limitations existed under the 2008-2012 farm bill with possible forfeiture of government payments on base acres planted to drybeans. Rules for 2013 are unknown as of 12/14/2012.
**Includes dessicant prior to straight cutting.
***Fungicide for white mold. A second treatment may be necessary. Fungicide for rust at $2-$4.50 plus application maybe necessary.

	Oil Sunflower		Confectionery Sunflower	
	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	1330	____________	1190	____________
Market Price	0.241	____________	0.317	____________
MARKET INCOME	320.53	____________	377.23	____________
DIRECT COSTS				
-Seed	30.36*	____________	45.98*	____________
-Herbicides	25.90	____________	28.00	____________
-Fungicides	0.00**	____________	0.00**	____________
-Insecticides	7.00***	____________	14.00***	____________
-Fertilizer	43.68	____________	37.07	____________
-Crop Insurance	20.20	____________	28.70	____________
-Fuel & Lubrication	21.23	____________	20.89	____________
-Repairs	18.13	____________	18.02	____________
-Drying	2.66	____________	2.38	____________
-Miscellaneous	9.00	____________	16.50	____________
-Operating Interest	4.10	____________	4.87	____________
	========	============	========	============
SUM OF LISTED DIRECT COSTS	182.26	____________	216.40	____________
INDIRECT (FIXED) COSTS				
-Misc. Overhead	7.53	____________	7.46	____________
-Machinery Depreciation	22.72	____________	22.51	____________
-Machinery Investment	13.77	____________	13.66	____________
-Land Charge	51.70	____________	51.70	____________
	========	============	========	============
SUM OF LISTED INDIRECT COSTS	95.72	____________	95.33	____________
SUM OF ALL LISTED COSTS	277.98	____________	311.73	____________
RETURN TO LABOR & MANAGEMENT	42.55	____________	65.50	____________
LISTED COSTS PER BUDGET UNIT	(lb):		(lb):	
-Direct Costs	0.14	____________	0.18	____________
-Indirect Costs	0.07	____________	0.08	____________
-Total Costs	0.21	____________	0.26	____________

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 $7.50 is under “Miscellaneous.”

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 $7.50 is under “Miscellaneous.”

	Canola		Flax	
	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	1660	____________	22	____________
Market Price	0.24	____________	13.17	____________
MARKET INCOME	398.40	____________	289.74	____________
DIRECT COSTS				
-Seed	47.00*	____________	14.40	____________
-Herbicides	19.00	____________	19.00	____________
-Fungicides	0.00**	____________	0.00*	____________
-Insecticides	0.00	____________	0.00	____________
-Fertilizer	97.80	____________	41.51	____________
-Crop Insurance	19.00	____________	12.10	____________
-Fuel & Lubrication	17.91	____________	20.28	____________
-Repairs	16.79	____________	18.64	____________
-Drying	0.00	____________	0.00	____________
-Miscellaneous	1.50	____________	1.50	____________
-Operating Interest	5.04	____________	2.93	____________
	========	============	========	============
SUM OF LISTED DIRECT COSTS	224.04	____________	130.36	____________
INDIRECT (FIXED) COSTS				
-Misc. Overhead	6.84	____________	7.20	____________
-Machinery Depreciation	20.19	____________	21.64	____________
-Machinery Investment	11.78	____________	13.28	____________
-Land Charge	51.70	____________	51.70	____________
	========	============	========	============
SUM OF LISTED INDIRECT COSTS	90.51	____________	93.81	____________
SUM OF ALL LISTED COSTS	314.54	____________	224.17	____________
RETURN TO LABOR & MANAGEMENT	83.86	____________	65.57	____________
LISTED COSTS PER BUDGET UNIT	(lb):		(bu):	
-Direct Costs	0.13	____________	5.93	____________
-Indirect Costs	0.05	____________	4.26	____________
-Total Costs	0.19	____________	10.19	____________

Canola notes:
*Cost includes insecticide seed treatment for flea beetles.
**Fungicide for white mold would cost about $18 plus application.

Flax notes:
*Fungicide treatment for pasmo has shown good yield response.

	Field Peas		Oats	
	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	36	____________	67	____________
Market Price	8.52*	____________	3.40	____________
MARKET INCOME	306.72	____________	227.80	____________
DIRECT COSTS				
-Seed	43.50**	____________	13.00	____________
-Herbicides	27.00	____________	5.00	____________
-Fungicides	1.50	____________	0.00	____________
-Insecticides	0.00	____________	0.00	____________
-Fertilizer	15.33	____________	64.56	____________
-Crop Insurance	12.80	____________	12.50	____________
-Fuel & Lubrication	20.99	____________	23.52	____________
-Repairs	19.30	____________	19.22	____________
-Drying	0.00	____________	0.00	____________
-Miscellaneous	9.25	____________	1.50	____________
-Operating Interest	3.44	____________	3.20	____________
	========	============	========	============
SUM OF LISTED DIRECT COSTS	153.11	____________	142.50	____________
INDIRECT (FIXED) COSTS				
-Misc. Overhead	7.30	____________	7.78	____________
-Machinery Depreciation	23.06	____________	23.29	____________
-Machinery Investment	13.16	____________	13.80	____________
-Land Charge	51.70	____________	51.70	____________
	========	============	========	============
SUM OF LISTED INDIRECT COSTS	95.22	____________	96.57	____________
SUM OF ALL LISTED COSTS	248.33	____________	239.07	____________
RETURN TO LABOR & MANAGEMENT	58.39	____________	(11.27)	____________
LISTED COSTS PER BUDGET UNIT	(bu):		(bu):	
-Direct Costs	4.25	____________	2.13	____________
-Indirect Costs	2.65	____________	1.44	____________
-Total Costs	6.90	____________	3.57	____________

Field Pea notes:
*Yellow pea food quality price. Use $10 for green pea food quality and about $6.50 for feed quality peas.
**Yellow pea seed cost, use $54 cost per acre for green pea seed.

	Yellow Mustard		Buckwheat	
	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	950	____________	950	____________
Market Price	0.393	____________	0.286	____________
MARKET INCOME	373.35	____________	271.70	____________
DIRECT COSTS				
-Seed	20.40	____________	33.50	____________
-Herbicides	13.00	____________	11.00	____________
-Fungicides	0.00	____________	0.00	____________
-Insecticides	6.00*	____________	0.00	____________
-Fertilizer	42.06	____________	24.69	____________
-Crop Insurance	20.00	____________	0.00*	____________
-Fuel & Lubrication	18.64	____________	21.75	____________
-Repairs	17.60	____________	19.20	____________
-Drying	0.00	____________	0.00	____________
-Miscellaneous	1.50	____________	1.50	____________
-Operating Interest	3.20	____________	2.57	____________
	========	============	========	============
SUM OF LISTED DIRECT COSTS	142.41	____________	114.21	____________
INDIRECT (FIXED) COSTS				
-Misc. Overhead	6.87	____________	7.27	____________
-Machinery Depreciation	20.58	____________	22.18	____________
-Machinery Investment	12.37	____________	13.57	____________
-Land Charge	51.70	____________	51.70	____________
	========	============	========	============
SUM OF LISTED INDIRECT COSTS	91.52	____________	94.72	____________
SUM OF ALL LISTED COSTS	233.93	____________	208.93	____________
RETURN TO LABOR & MANAGEMENT	139.42	____________	62.77	____________
LISTED COSTS PER BUDGET UNIT	(lb):		(lb):	
-Direct Costs	0.15	____________	0.12	____________
-Indirect Costs	0.10	____________	0.10	____________
-Total Costs	0.25	____________	0.22	____________

Yellow Mustard notes:
*Insecticide seed treatment for flea beetles.

Buckwheat notes:
*Crop insurance is not available in this region.

	Millet		Winter Wheat	
	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	1600	____________	51*	____________
Market Price	0.185	____________	8.02	____________
MARKET INCOME	296.00	____________	409.02	____________
DIRECT COSTS				
-Seed	13.75	____________	13.50	____________
-Herbicides	3.00	____________	22.00	____________
-Fungicides	0.00	____________	9.00	____________
-Insecticides	0.00	____________	0.00	____________
-Fertilizer	34.44	____________	100.06	____________
-Crop Insurance	0.00	____________	23.90	____________
-Fuel & Lubrication	20.84	____________	16.57	____________
-Repairs	18.32	____________	15.91	____________
-Drying	0.00	____________	0.00	____________
-Miscellaneous	1.50	____________	7.00	____________
-Operating Interest	2.11	____________	4.78	____________
	========	============	========	============
SUM OF LISTED DIRECT COSTS	93.96	____________	212.72	____________
INDIRECT (FIXED) COSTS				
-Misc. Overhead	7.19	____________	6.58	____________
-Machinery Depreciation	21.65	____________	18.60	____________
-Machinery Investment	12.92	____________	10.29	____________
-Land Charge	51.70	____________	51.70	____________
	========	============	========	============
SUM OF LISTED INDIRECT COSTS	93.46	____________	87.16	____________
SUM OF ALL LISTED COSTS	187.42	____________	299.88	____________
RETURN TO LABOR & MANAGEMENT	108.58	____________	109.14	____________
LISTED COSTS PER BUDGET UNIT	(lb):		(bu):	
-Direct Costs	0.06	____________	4.17	____________
-Indirect Costs	0.06	____________	1.71	____________
-Total Costs	0.12	____________	5.88	____________

Winter Wheat notes:
*Yield is per harvested acre. There is some risk of acreage abandonment in spring.

2013 Machinery List

Machine	Purch. Price	Annual Use	Years to trade	Trade in	Deprec.	Invest.	Repairs	Ac/hr
FWA 120HP Tractor	122500	400hr	20	37244	10.66 /hr	8.99 /hr	11.76 /hr	
FWA 180HP Tractor	166000	500hr	15	46377	15.95 /hr	9.56 /hr	15.96 /hr	
4WD 330HP Tractor	218800	500hr	15	61022	21.04 /hr	12.59 /hr	12.00 /hr	
SP Combine (base unit)	268400	250hr	12	62943	68.49 /hr	29.82 /hr	41.08 /hr	
Tandem Truck (used)	36600	150hr	15	11700	11.07 /hr	7.25 /hr	7.33 /hr	
Semi & Trailer (used)	41000	150hr	10	11800	19.47 /hr	7.92 /hr	8.93 /hr	
Pick-up Truck	28900	300hr	10	5700	7.47 /hr	2.60 /hr	3.30 /hr	
Swather 25 ft	23100	1000ac	20	5460	0.88 /ac	0.64 /ac	0.40 /ac	12.1
Sprayer 90 ft	36600	5000ac	10	18179	0.37 /ac	0.25 /ac	0.47 /ac	42.5
Chisel Plow 38 ft	40800	3000ac	15	23839	0.38 /ac	0.48 /ac	0.90 /ac	19.6
Field Cultivator 48 ft	46800	3000ac	15	27316	0.43 /ac	0.56 /ac	0.82 /ac	24.7
Tandem Disk 28 ft	32300	800ac	20	9247	1.44 /ac	1.17 /ac	0.91 /ac	12.2
Heavy Harrow 70 ft	29200	2000ac	20	17060	0.30 /ac	0.52 /ac	0.33 /ac	39.7
Air Seeder 40 ft	170400	2400ac	12	80295	3.12 /ac	2.35 /ac	5.89 /ac	17.0
Planter 16-30	106300	1400ac	15	44178	2.96 /ac	2.42 /ac	4.41 /ac	14.2
Corn head	55300	800ac	12	15834	4.10 /ac	2.00 /ac	1.28 /ac	6.8
Grain head w/pu	14700	800ac	15	3064	0.97 /ac	0.50 /ac	0.28 /ac	8.5
Grain str. cut 30 ft	24500	1000ac	15	4979	1.30 /ac	0.66 /ac	0.38 /ac	10.2
Head w/sunf pans 30 ft	29500	600ac	20	3018	2.20 /ac	1.22 /ac	0.46 /ac	10.2
Soybeans str. cut 30 ft	36300	1000ac	20	3330	1.65 /ac	0.89 /ac	0.56 /ac	10.2
Rock picker	21000	50hr	20	6712	0.48 /ac	0.42 /ac	0.31 /ac	29.1
Grain Cart	28700	100hr	20	4900	11.90 /hr	7.56 /hr	7.20 /hr	
Grain auger	12000	50hr	20	700	11.30 /hr	5.72 /hr	4.50 /hr	

Example Sequence of Operations

Field operations sequence for spring wheat and durum.

OP. NO.	DESCRIPTION	(FEET) WIDTH	(MPH) SPEED	(AC/HR) Fld Cap	($/AC) FUEL & LUBE	($/AC) EST. REPAIRS
1	Field Cultivate	48	5.0	24.7	$ 2.30	$ 1.31
2	Pick Rocks				0.71	0.72
3	Plant	40	5.0	17.0	3.35	6.61
4	Spray (130%)	90	6.0	42.5	0.63	0.97
5	Combine	30	4.0	10.2	4.56	4.41
6	Chisel Plow	38	5.0	19.6	2.90	1.52
	Grain Cart				1.13	0.30
	Trucks*				2.16	0.82
	Grain auger (pto)				0.23	0.09
	Pickup truck allocation				1.86	0.56
				Total	19.82	17.33

* Truck costs will vary between crops.

For more information on this and other topics, see **www.ag.ndsu.edu**

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