

AgriProfit\$

2016 Cropping Alternatives

Economics & Competitiveness



Disclaimer:

The following regional forecasts are based on the most current cost of production information from the AgriProfit\$ Business Analysis & Research Program and estimates of expected revenues and costs from various sources. Producers should use their own costs and revenue projections to make cropping decisions for farm operations. There is a risk of over or under-estimating costs and returns based on regional benchmarks and forecasts. Producers are advised not to base cropping decisions solely on info provided in the following budgets. Alberta Agriculture & Forestry crop budgeting software program **CropChoice\$** and the blank individual form are available to customize your own crop budgets. You can download CropChoice\$ software free of charge at the following link: www.agriculture.alberta.ca/cropchoices.

Prices:

Expected market prices are estimates ONLY, which are based on forecasts for 2016 new crop. Prices in these budgets are estimated by Agriculture and Forestry specialists using future price outlooks less Alberta deductions, Informa Economics forecasts, and Agriculture and Agri-Food Canada's Market Outlook Reports. Prices are not adjusted to reflect differences in soil zone regions other than differences in grade. Use this information with caution as current prices may not match new crop market signals.

Yields:

There is a wide range of yields within each soil zone region. Therefore, yield estimates by crop represent average achievable target yields, which are supported by regional crop specialists.

Seed Costs: (See the following Seeding Rate Table.)

Seed costs are based on data collected by the Alberta Farm Input Prices Survey (AIMS) and seed suppliers as well as a seed cost multiplier for a blend of certified and common seed that is cleaned and treated. Seeding rates for each soil zone are based on 1000 kernel weight for common varieties, 90-95% germination, 3-5% emergence mortality, and 9" spacing. Seeding rates for forages are based on 1000 kernel weight for common varieties, pure live seed and a 50-50 split of broadcasted and row seeded plantings.

Fertilizer Costs:

Prices are based on an average of high, low and medium of blend of fall 2015 and indications for spring 2016 such as fall and spring application, and pre-buying inputs. NPKS blends are based on estimated crop requirements for nutrient deficient, stubble-seeded crops in each soil zone.

Nitrogen	\$0.6/lb actual N	(\$609.28/tonne for 46-0-0)
Phosphorous	\$0.6/lb actual P	(\$820.89/tonne for 11-51-0)
Potassium	\$0.42/lb actual K	(\$561.25/tonne for 0-0-60)
Sulphur	\$0.44/lb actual S	(\$500/tonne for 20-0-0-24)

Soil testing is recommended to maximize fertilizer budget to field production capacity and crop choice. Alberta Farm Fertilizer Information and Recommendation Manager (AFFIRM) is an Alberta Agriculture and Forestry software tool that can help producers optimize fertilizer requirements for crop production. Variable rate technology is also an option being explored by producers to maximize production to fertilizer and input expenses. In a mature commodity market, managing costs could mean the difference between farm profitability or farm losses.

Chemical: (See the following Chemical Application Table.)

Chemical costs are based on stubble-seeded crops requiring a non-selective, pre-seed burn-off, and one in-crop herbicide application for broadleaf weeds, grassy weeds or both. Feed barley is based on 50% of the acres receiving an in-crop herbicide treatment. Fungicides, insecticides and/or pre-harvest/desiccation applications (F/I/PH/D) are indicated by an asterisk *.



2016 Cropping Alternatives Methodology

Prepared December 15, 2015

Rawlin Thangaraj, Economics Branch

Hail/Crop Insurance:

Insurance is based on information from AgriProfit\$ and Alberta Financial Services Corporation (AFSC).

Trucking & Marketing:

Trucking and marketing costs are based on AgriProfit\$ data and estimates ranging from \$18-29/tonne.

Fuel, Oil & Lube, Machinery Repairs, Building Repairs, Pumping Costs (Irrigation only), Custom Work, Labour (Paid and Unpaid), Utilities & Miscellaneous, Operating Interest, and Storage and/or Levies:

These costs are based on information collected by the AgriProfit\$ program and the Alberta Farm Input Prices Survey. Many of these costs are influenced significantly by differences in regional farming practices. Fuel costs also include an adjustment factor for yield.

Operating Interest:

4.64% per annum for inputs borrowed (seed, fertilizer and chemical).

Contribution Margin:

Contribution margin represents the amount a particular crop contributes to fixed costs, and return to management and equity. Use the contribution margin to compare crop choices. Positive contribution margin indicates that the enterprise/crop is economically sustainable.

Capital Costs By Enterprise:

Fixed costs generally do not vary greatly from crop to crop, but these can vary between enterprises and soil zone regions. Average fixed cost profiles by enterprise are included for your information. The capital costs are adjusted to reflect costs averaged for owned and rented fields.

Summer Fallow:

The summer fallow columns included in the Brown and Dark Brown budgets are only provided to reference the expected costs incurred in a non-crop year. Fallow-seeded crops are not included in this analysis because this practice has significantly declined. Producers wanting to evaluate fallow-seeded crops can use CropChoice\$ or the blank worksheet provided.

Contribution Margin Calculation:

Value of Production - Total Direct Expenses

Total Cost per Unit Calculation:

(Total Direct Expenses + Adjusted Capital Costs) divided by Expected Yield per Acre

Break-Even Yield Calculation:

(Total Direct Expenses + Adjusted Capital Costs) divided by Expected Market Price

Acknowledgements:

ARD: Neil Blue, Emmanuel Laate, Todd Bergen-Henengouwen, Diane McCain-Hiltz, Rod Bennett, Industry Partners; AFSC: Ken Handford

2016 Cropping Alternatives

Seeding Rate by Alberta Soil Zones

	Black			Brown			Dark Brown			Grey-Wooded			Peace Region			Irrigation		
	lbs/ac	bu/ac	\$/ac	lbs/ac	bu/ac	\$/ac	lbs/ac	bu/ac	\$/ac	lbs/ac	bu/ac	\$/ac	lbs/ac	bu/ac	\$/ac	lbs/ac	bu/ac	\$/ac
spring wheat		2	24.75		1.75	21.66		1.75	21.66		2	24.75		1.75	21.66		2.25	27.84
cps wheat		2	24.05		1.75	21.04		1.75	21.04		2	24.05		1.75	21.04		2.25	27.06
durum wheat					1.75	28.00		1.75	28.00								2	32.00
soft white wheat																	2	21.00
winter wheat								2	21.23									
malt barley		2	22.50		1.75	19.69		2	22.50		2	22.50		1.75	19.69		2.5	28.13
feed barley		2	19.00		1.75	16.63		2	19.00		2	19.00		1.75	16.63		2.5	23.75
milling oats		2.5	18.13		2	14.50		2.25	16.31		2.25	16.31		2	14.50			
argentine canola	5		55.43	4		44.34	5		55.43	5		55.43	4		44.34	5		55.43
polish canola													4		22.00			
field pea		3	46.50		2.75	42.63		2.75	42.63		3	46.50		2.75	42.63			
yellow mustard				9		16.20	10		18.00									
chickpeas				120		57.62												
lentils				80		48.00												
flax							45		0.00									
sugar beets																10		196.00
potatoes																2000		367.17
dry beans																60		49.51
cereal silage		2.25	17.64					2	15.68		2.25	17.64		2	15.68		2.5	19.60
mixed hay	11		3.53	10		3.24	10		3.24	11		3.53	11		3.53			
alfalfa hay	10		10.63							10		16.11	10		16.11	14		22.56

Chemical Application by Alberta Soil Zones

	Black			Brown			Dark Brown			Grey-Wooded			Peace Region (Grey-Wooded)			Irrigation		
	PreSeed	In Crop	F//PH/D	PreSeed	In Crop	F//PH/D	PreSeed	In Crop	F//PH/D	PreSeed	In Crop	F//PH/D	PreSeed	In Crop	F//PH/D	PreSeed	In Crop	F//PH/D
spring wheat	6.06	20.91	14.21	0.00	0.00	0.00	0.00	0.00	0.00	6.06	20.91	8.88	6.06	20.91	8.88	6.06	20.91	17.76
cps wheat	6.06	20.91		0.00	0.00		0.00	0.00		6.06	20.91		6.06	20.91		6.06	20.91	17.76
durum wheat				0.00	0.00	0.00	0.00	0.00	0.00							6.06	20.91	17.76
soft white wheat																6.06	20.91	17.76
winter wheat							0.00	0.00										
malt barley	6.06	20.91		0.00	0.00		0.00	0.00		6.06	20.91		6.06	20.91		6.06	20.91	17.76
feed barley	6.06	10.46		0.00	0.00		0.00	0.00		6.06	10.46		6.06	10.46		6.06	10.46	6.06
milling oats	6.06	7.78		0.00	0.00		6.06	7.78		6.06	7.78		6.06	7.78				
argentine canola	6.06	12.63		0.00	0.00		6.06	12.63		6.06	12.63		6.06	12.63		6.06	12.63	19.70
polish canola													6.06	11.11				
field pea	6.06	13.13	15.15	6.06	13.13	15.15	6.06	13.13	15.15	6.06	13.13	15.15	6.06	13.13				
yellow mustard				6.06	10.10		6.06	10.10										
chickpeas				12.38	5.05	19.99												
lentils				6.06	11.62	0.00												
flax							6.06	17.17										
sugar beets																6.06	16.16	22.73
potatoes																0.00	0.00	0.00
dry beans																6.06	14.14	22.73
cereal silage	6.06	7.78					6.06	7.78		6.06	7.78		6.06	7.78		6.06	7.78	
mixed hay	1.52			1.52			1.52			1.52			1.52					
alfalfa hay	1.89									1.89			1.89			2.27		

2016 Cropping Alternatives

Individual Production Costs & Returns (\$/Acre)

<i>AgriProfit</i> \$	Crop 1	Crop 2	Crop 3	Crop 4	Crop 5
Expected Yield per Acre					
Expected Market Price per Unit					
Value of Production					
Direct Expenses:					
Seed, cleaning and treatment					
Fertilizer					
Chemical					
Hail & Crop Insurance					
Trucking & Marketing					
Fuel, Oil & Lube					
Irrigation: Pumping Costs					
Machinery Repairs					
Building Repairs					
Utilities & Miscellaneous					
Custom Work					
Paid Labour					
Unpaid Labour					
Operating Interest					
Summerfallow Expense					
Other Expenses					
Total Direct Expense					
Contribution Margin					
Cash/Share Rent & Land Lease					
Taxes, Licenses & Insurance					
Water Rates (Irrigation only)					
Depreciation & Lease Payments					
Paid Capital Interest					
Total Capital Costs					
Return to Mgmt & Equity					
Break-Even Yield					
Break-Even Price					

2016 Cropping Alternatives

2016 Production Costs and Returns (\$/acre)

Black Soils

Stubble Seeded Crops

<i>AgriProfit</i> \$	Spring Wheat 2 CWRS 11.5%	CPS Wheat 1 CPSR	Feed Barley 1 CW	Malt Barley Select CW 2R	Milling Oats 3 CW	Argentine HT Canola 1 CAN	Field Peas 2 CAN	Mixed Hay	Alfalfa Hay	Cereal Silage
Expected Yield per Acre	65.00 bu	75.00 bu	90.00 bu	75.00 bu	115.00 bu	45.00 bu	50.00 bu	2.25 t	2.50 t	6.50 t
Expected Market Price	5.85 /bu	5.55 /bu	3.92 /bu	5.23 /bu	2.54 /bu	10.66 /bu	8.44 /bu	88.18 /t	110.23 /t	45.93 /t
Crop Sales (\$/acre)	380.38	416.44	352.71	391.90	292.64	479.70	421.88	198.41	275.58	298.55
Direct Expenses:										
Seed, Cleaning & Treatment	24.75	24.05	19.00	22.50	18.13	55.43	46.50	3.53	10.63	17.64
Fertilizer (NPKS blend)	70.50 80-30-10-0	70.50 80-30-10-0	70.50 80-30-10-0	73.00 70-30-20-10	60.00 70-30-0-0	99.50 100-40-15-20	27.50 5-30-15-0	18.00 15-15-0-0	18.00 5-25-0-0	54.00 65-25-0-0
Chemical	41.19 *	41.19 *	16.52	41.19 *	13.84	34.45 *	34.35 *	1.52	1.89	13.84
Hail/Crop Insurance	15.01	17.30	13.43	13.43	15.60	18.63	18.87	0.00	0.00	0.00
Trucking & Marketing	31.14	35.93	34.50	28.75	31.22	17.97	23.95	54.46	60.51	19.07
Fuel, Oil & Lube	15.80	14.30	14.95	16.44	10.46	16.23	20.50	6.83	4.27	26.90
Machinery Repairs	17.47	17.22	11.65	16.97	11.65	15.45	17.98	15.20	7.09	11.14
Building Repairs	2.03	5.07	2.03	5.57	2.79	2.28	4.56	5.07	3.04	3.55
Custom Work	2.07	2.07	2.33	3.11	15.01	2.59	8.54	2.07	4.66	5.18
Labour (Paid and Unpaid)	18.43	22.53	14.85	24.06	19.97	18.94	22.53	25.60	11.26	32.77
Utilities & Miscellaneous	11.95	11.95	11.95	11.95	11.95	14.55	14.55	7.25	7.25	8.30
Operating Interest	6.33	6.30	4.92	6.34	4.27	8.79	5.03	1.07	1.42	3.97
Total Direct Expense	256.67	268.40	216.61	263.31	214.88	304.80	244.85	140.59	130.02	196.35
Contribution Margin	123.71	148.04	136.10	128.59	77.76	174.90	177.03	57.81	145.55	102.20

Total Cost per Unit	5.42	4.86	3.47	4.79	2.70	8.90	6.81	98.75	84.65	42.76
Break-Even Yield	61.00 bu	66.00 bu	80.00 bu	69.00 bu	123.00 bu	38.00 bu	41.00 bu	2.52 t	1.92 t	6.05 t

Capital Costs by Enterprise	Crops	Forages
Crop Share/Cash Rent	73.00	46.43
Licenses and Insurance	12.31	6.15
Depreciation	44.80	47.60
Paid Capital Interest	7.26	4.84
Total Capital Costs	122.84	104.61
Adjusted Capital Costs	95.82	81.59

Questions?
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Note: Please refer to 2015 Methodology on Ropin the Web.

Prepared December 15, 2015

2016 Cropping Alternatives

2016 Production Costs and Returns (\$/acre)

Brown Soils

Stubble Seeded Crops

<i>AgriProfit</i> ®	Spring Wheat 1 CWRS 13.5%	CPS Wheat 1 CPSR	Durum Wheat 1 CWAD 13%	Feed Barley 1 CW	Malt Barley Select CW 2R	Milling Oats 3 CW	Argentine HT Canola 1 CAN	Field Peas 2 CAN	Lentils 2 CAN	Kabuli Chickpea 2 CW 8mm	Yellow Mustard 1 CAN	Mixed Hay	Summer Fallow
Expected Yield per Acre	40.00 bu	45.00 bu	40.00 bu	65.00 bu	50.00 bu	75.00 bu	25.00 bu	40.00 bu	1200.00 lbs	1200.00 lbs	750.00 lbs	1.50 t	0.00
Expected Market Price	6.53 /bu	5.55 /bu	6.94 /bu	3.92 /bu	5.23 /bu	2.54 /bu	10.66 /bu	8.44 /lb	0.34 /lb	0.24 /lb	0.45 /lb	88.18 /t	0.00
Crop Sales (\$/acre)	261.30	249.86	277.63	254.74	261.27	190.85	266.50	337.51	408.11	288.08	337.59	132.27	0.00
Direct Expenses:													
Seed, Cleaning & Treatment	21.66	21.04	28.00	16.63	19.69	14.50	44.34	42.63	48.00	57.62	16.20	3.24	0.00
Fertilizer (NPKS blend)	44.00 50-20-5-0	44.00 50-20-5-0	44.00 50-20-5-0	53.00 60-25-5-0	56.50 50-30-10-10	42.00 50-20-0-0	62.50 65-25-10-10	19.50 5-20-10-0	15.00 5-20-0-0	21.00 5-30-0-0	40.50 40-20-0-10	12.00 10-10-0-0	0.00
Chemical	31.53 *	31.53 *	31.53 *	13.21	35.47 *	12.46	29.23 *	34.35 *	17.68	37.42 *	16.16	1.52	18.00
Hail/Crop Insurance	13.56	16.46	15.58	12.44	12.44	11.02	20.46	16.23	24.91	21.45	15.86	0.00	0.00
Trucking & Marketing	19.16	21.56	19.16	24.91	19.16	20.36	9.98	19.16	11.71	11.71	7.32	36.31	0.00
Fuel, Oil & Lube	9.66	9.04	9.12	11.10	10.03	9.85	10.03	9.50	9.82	11.74	11.10	5.76	6.19
Machinery Repairs	14.94	11.40	12.16	8.61	8.10	10.13	8.10	10.89	8.10	9.12	8.61	10.13	9.12
Building Repairs	1.52	2.53	1.27	1.01	1.01	2.53	1.52	2.28	2.79	2.03	1.01	3.04	1.01
Custom Work	4.14	1.55	3.62	4.14	2.59	2.59	8.28	2.07	2.07	4.14	3.11	2.07	0.00
Labour (Paid and Unpaid)	21.50	17.92	17.92	16.38	16.38	14.34	18.94	13.57	13.31	15.36	13.82	16.38	10.24
Utilities & Miscellaneous	11.95	11.95	10.35	10.35	10.35	7.25	10.35	10.35	7.75	8.85	8.30	6.25	3.00
Operating Interest	4.51	4.48	4.80	3.84	5.18	3.20	6.31	4.48	3.74	5.38	3.38	0.78	0.84
Total Direct Expense	198.14	193.47	197.51	175.64	196.91	150.22	230.06	185.00	164.89	205.82	145.39	97.48	48.40
Contribution Margin	63.16	56.39	80.12	79.10	64.36	40.64	36.44	152.51	243.22	82.25	192.21	34.79	(48.40)

Total Cost per Unit	6.60	5.76	6.59	3.72	5.26	2.88	11.84	6.27	0.19	0.23	0.28	103.60	N/A
Break-Even Yield	41.00 bu	47.00 bu	38.00 bu	62.00 bu	51.00 bu	85.00 bu	28.00 bu	30.00 bu	679.00 lbs	1133.00 lbs	470.00 lbs	1.76 t	N/A

Capital Costs by Enterprise	Crops	Forages
Crop Share/Cash Rent	39.15	31.32
Licenses and Insurance	6.15	8.95
Depreciation	26.88	30.80
Paid Capital Interest	12.37	3.23
Total Capital Costs	84.53	74.27
Adjusted Capital Costs	65.94	57.93

Questions?
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 Alberta Agriculture and Rural Development
Note: Please refer to 2015 Methodology on Ropin the Web.

Prepared December 15, 2015

2016 Cropping Alternatives

2016 Production Costs and Returns (\$/acre)

Dark Brown Soils

Stubble Seeded Crops

<i>AgriProfit</i> \$	Spring Wheat <small>1 CWRS 13.5%</small>	CPS Wheat <small>1 CPSR</small>	Durum Wheat <small>1 CWAD 13%</small>	Winter Wheat <small>Select CWRW</small>	Feed Barley <small>1 CW</small>	Malt Barley <small>Select CW 2R</small>	Milling Oats <small>3 CW</small>	Argentine HT Canola <small>1 CAN</small>	Field Peas <small>2 CAN</small>	Flax <small>1 CW</small>	Yellow Mustard <small>1 CAN</small>	Mixed Hay	Cereal Silage	Lentils
Expected Yield per Acre	45.00 bu	50.00 bu	45.00 bu	50.00 bu	70.00 bu	55.00 bu	85.00 bu	30.00 bu	45.00 bu	20.00 bu	850.00 lbs	1.75 t	5.00 t	1200.00
Expected Market Price	6.53 /bu	5.55 /bu	6.94 /bu	5.31 /bu	3.92 /bu	5.23 /bu	2.54 /bu	10.66 /bu	8.44 /bu	12.45 /bu	0.45 /lb	88.18 /t	45.93 /t	0.34
Crop Sales (\$/acre)	293.96	277.63	312.33	265.38	274.33	287.39	216.30	319.80	379.70	248.92	382.60	154.32	229.65	408.00
Direct Expenses:														
Seed, Cleaning & Treatment	21.66	21.04	28.00	21.23	19.00	22.50	16.31	55.43	42.63	0.00	18.00	3.24	15.68	48.00
Fertilizer (NPKS blend)	53.00 60-25-5-0	53.00 60-25-5-0	53.00 60-25-5-0	53.00 60-25-5-0	59.00 70-25-5-0	65.00 60-30-15-10	45.00 55-20-0-0	74.00 75-30-10-15	19.50 5-20-10-0	42.00 50-20-0-0	49.50 50-25-0-10	15.00 10-15-0-0	48.00 60-20-0-0	18.00 5-25-0-0
Chemical	35.47 *	35.47 *	35.47 *	12.46 *	13.21	35.47 *	13.84	32.48 *	34.35 *	23.24 *	16.16	1.52	13.84	17.68
Hail/Crop Insurance	14.59	17.25	16.19	12.38	12.88	12.88	12.57	22.26	16.23	19.17	15.88	0.00	0.00	24.91
Trucking & Marketing	21.56	23.95	21.56	23.95	26.83	21.08	23.08	11.98	21.56	8.94	8.30	42.36	14.67	11.71
Fuel, Oil & Lube	8.30	9.77	9.93	9.64	10.68	10.19	8.20	10.16	10.26	7.49	11.10	7.52	11.10	9.82
Machinery Repairs	12.41	12.66	11.14	12.16	12.16	12.66	11.14	15.20	13.68	11.14	11.14	9.62	7.09	8.10
Building Repairs	1.01	1.52	1.01	1.01	2.03	2.53	1.01	1.52	1.77	1.52	1.52	2.53	1.27	2.79
Custom Work	2.07	3.11	3.11	3.11	6.21	6.21	2.07	5.18	3.11	8.28	4.66	9.83	41.40	2.07
Labour (Paid and Unpaid)	12.80	13.31	11.78	12.80	12.54	13.31	13.31	14.34	12.54	14.85	13.82	10.24	10.24	13.31
Utilities & Miscellaneous	11.95	11.95	10.35	10.35	10.35	10.35	7.25	10.35	10.35	10.35	10.35	7.25	8.30	0.00
Operating Interest	5.11	5.08	5.40	4.02	4.23	5.71	3.49	7.51	4.48	3.03	3.88	0.92	3.60	3.88
Total Direct Expense	199.93	208.11	206.94	176.11	189.12	217.89	157.28	260.38	190.44	150.00	164.33	110.02	175.18	160.28
Contribution Margin	94.03	69.52	105.39	89.27	85.21	69.50	59.02	59.42	189.26	98.92	218.28	44.29	54.47	247.72

Total Cost per Unit	6.38	5.90	6.53	5.26	3.94	5.54	2.87	11.58	6.17	11.85	0.30	92.51	45.41	0.18
Break-Even Yield	44.00 bu	54.00 bu	43.00 bu	50.00 bu	71.00 bu	59.00 bu	97.00 bu	33.00 bu	33.00 bu	20.00 bu	559.00 lbs	1.84 t	4.94	623.95 lbs

Capital Costs by Enterprise	Crops	Forages
Crop Share/Cash Rent	54.00	29.09
Licenses and Insurance	5.31	5.59
Depreciation	28.00	17.36
Paid Capital Interest	6.46	14.52
Total Capital Costs	111.57	66.49
Adjusted Capital Costs	87.03	51.86

Questions?
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2016 Cropping Alternatives

2016 Production Costs and Returns (\$/acre)

Grey-Wooded Soils

Stubble Seeded Crops

<i>AgriProfit</i> \$	Spring Wheat 2 CWRS 11.5%	CPS Wheat 1 CPSR	Feed Barley 1 CW	Malt Barley Select CW 2R	Milling Oats 3 CW	Argentine HT Canola 1 CAN	Field Peas 2 CAN	Alfalfa Hay	Mixed Hay	Cereal Silage
Expected Yield per Acre	65.00 bu	75.00 bu	90.00 bu	75.00 bu	115.00 bu	45.00 bu	50.00 bu	2.25 t	2.50 t	6.50 t
Expected Market Price	5.85 /bu	5.55 /bu	3.92 /bu	5.23 /bu	2.54 /bu	10.66 /bu	8.44 /bu	110.23 /t	88.18 /t	45.93 /t
Crop Sales (\$/acre)	380.38	416.44	352.71	391.90	292.64	479.70	421.88	248.02	220.45	298.55
Direct Expenses:										
Seed, Cleaning & Treatment	24.75	24.05	19.00	22.50	16.31	55.43	46.50	16.11	3.53	17.64
Fertilizer (NPKS blend)	67.50 80-25-10-0	67.50 80-25-10-0	70.50 80-30-10-0	70.00 70-25-25-5	60.00 75-25-0-0	103.50 100-40-25-20	24.50 5-25-15-0	18.00 5-25-0-0	21.00 20-15-0-0	57.00 70-25-0-0
Chemical	35.86 *	35.86 *	16.52	35.86 *	13.84	28.54 *	34.35 *	1.89	1.52	13.84
Hail/Crop Insurance	20.78	20.48	16.38	16.38	16.58	20.99	19.09	0.00	0.00	0.00
Trucking & Marketing	31.14	35.93	34.50	28.75	31.22	17.97	23.95	54.46	60.51	19.07
Fuel, Oil & Lube	14.43	12.93	15.80	12.71	17.93	18.15	18.79	8.54	10.25	17.93
Machinery Repairs	17.22	14.94	14.18	17.22	13.17	22.79	20.51	7.60	11.65	15.45
Building Repairs	1.01	2.53	2.53	2.03	3.55	2.03	3.55	1.52	1.01	1.01
Custom Work	5.18	5.43	5.69	5.69	7.25	5.69	5.18	17.60	5.69	36.23
Labour (Paid and Unpaid)	22.02	20.99	21.50	20.22	21.50	24.58	23.30	17.92	18.94	21.50
Utilities & Miscellaneous	11.95	11.95	11.95	11.95	11.95	14.55	14.55	7.25	6.75	8.30
Operating Interest	5.94	5.91	4.92	5.96	4.18	8.70	4.89	1.67	1.21	4.11
Total Direct Expense	257.78	258.51	233.48	249.26	217.49	322.90	239.15	152.56	142.07	212.08
Contribution Margin	122.60	157.93	119.23	142.64	75.16	156.80	182.74	95.46	78.38	86.47

Total Cost per Unit	5.67	4.93	3.83	4.80	2.86	9.64	7.00	90.73	77.46	40.56
Break-Even Yield	64.00 bu	67.00 bu	88.00 bu	69.00 bu	130.00 bu	41.00 bu	42.00 bu	1.85 t	2.20 t	5.74 t

Capital Costs by Enterprise	Crops	Forages
Crop Share/Cash Rent	57.05	27.97
Licenses and Insurance	11.75	5.03
Depreciation	51.52	28.56
Paid Capital Interest	22.59	4.84
Total Capital Costs	142.22	66.13
Adjusted Capital Costs	110.93	51.58

Questions?

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Alberta Agriculture and Rural Development

Note: Please refer to 2015 Methodology on Ropin the Web.

Prepared December 15, 2015

2016 Cropping Alternatives

2016 Production Costs and Returns (\$/acre)

Grey-Wooded (Peace Region)

Stubble Seeded Crops

<i>AgriProfit</i> \$	Spring Wheat 2 CWRS 11.5%	CPS Wheat 1 CPSR	Feed Barley 1 CW	Malt Barley Select CW 2R	Milling Oats 3 CW	Argentine HT Canola 1 CAN	Polish Canola 1 CAN	Field Peas 2 CAN	Mixed Hay	Alfalfa Hay	Cereal Silage
Expected Yield per Acre	55.00 bu	65.00 bu	80.00 bu	70.00 bu	100.00 bu	40.00 bu	30.00 bu	45.00 bu	1.75 t	2.00 t	6.00 t
Expected Market Price	5.44 /bu	5.55 /bu	3.92 /bu	5.23 /bu	2.54 /bu	10.66 /bu	10.00 /bu	8.44 /bu	88.18 /t	110.23 /t	45.93 /t
Crop Sales (\$/acre)	299.40	360.91	313.52	365.77	254.47	426.40	300.00	379.70	154.32	220.46	275.58
Direct Expenses											
Seed, Cleaning & Treatment	21.66	21.04	16.63	19.69	14.50	44.34	22.00	42.63	3.53	16.11	15.68
Fertilizer (NPKS blend)	59.00 70-25-5-0	59.00 70-25-5-0	59.00 70-25-5-0	59.50 60-25-15-5	51.00 65-20-0-0	84.00 85-30-20-15	60.50 70-20-5-10	21.50 5-20-15-0	18.00 20-15-0-0	15.00 5-20-0-0	57.00 70-25-0-0
Chemical	35.86 *	35.86 *	16.52	35.86 *	13.84	28.54 *	17.17	34.35 *	1.52	1.89	13.84
Hail/Crop Insurance	16.84	18.17	14.22	14.22	18.00	20.41	13.10	19.09	0.00	19.20	11.03
Trucking & Marketing	26.35	31.14	30.66	26.83	27.15	15.97	11.98	21.56	42.36	48.41	17.60
Fuel, Oil & Lube	7.77	7.99	8.31	9.67	10.25	9.80	7.95	9.96	10.60	12.81	18.79
Machinery Repairs	12.16	12.16	11.14	12.16	12.66	12.66	12.16	13.17	10.13	8.10	10.13
Building Repairs	3.80	3.04	2.03	2.03	2.53	4.31	2.03	3.04	1.52	1.01	1.52
Custom Work	3.11	3.11	6.21	6.47	4.66	3.62	2.85	5.18	0.00	0.00	39.85
Labour (Paid and Unpaid)	18.43	18.43	17.41	18.94	17.41	19.46	16.90	15.36	10.75	10.24	11.26
Utilities & Miscellaneous	11.95	11.95	11.95	11.95	11.95	14.55	10.35	10.35	6.75	6.75	6.75
Operating Interest	5.41	5.38	4.28	5.34	3.68	7.28	4.62	4.57	1.07	1.53	4.01
Total Direct Expense	222.32	227.25	198.35	222.64	187.63	264.94	181.60	200.74	106.23	141.06	207.46
Contribution Margin	77.08	133.66	115.17	143.13	66.84	161.46	118.40	178.96	48.09	79.40	68.12

Total Cost per Unit	5.67	4.87	3.60	4.46	2.77	8.86	9.04	6.45	84.01	90.93	41.38
Break-Even Yield	58.00 bu	58.00 bu	74.00 bu	60.00 bu	109.00 bu	34.00 bu	28.00 bu	35.00 bu	1.67 t	1.65 t	5.41 t

Capital Costs by Enterprise	Crops	Forages
Crop Share/Cash Rent	47.62	22.93
Licenses and Insurance	10.07	4.47
Depreciation	45.92	19.60
Paid Capital Interest	13.45	5.38
Total Capital Costs	117.05	52.30
Adjusted Capital Costs	89.51	40.79

Questions?
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2016 Cropping Alternatives

2016 Production Costs and Returns (\$/acre)

Irrigated Soils

Stubble Seeded Crops

<i>AgriProfit</i> \$	Spring Wheat 1 CWRS 13.5%	CPS Wheat 1 CPSR	Durum Wheat 1 CWAD 13%	Soft Wheat 1 CWSWS	Feed Barley 1 CW	Malt Barley Select CW 2R	Argentine HT Canola 1 CAN	Sugar Beets	Process Potatoes	Dry Beans 1 CAN	Alfalfa Hay	Cereal Silage
Expected Yield per Acre	90.00 bu	100.00 bu	100.00 bu	110.00 bu	110.00 bu	95.00 bu	60.00 bu	27.00 t	15.50 t	2300.00 lbs	4.00 t	12.00 t
Expected Market Price	6.53 /bu	5.55 /bu	6.94 /bu	5.44 /bu	3.92 /bu	5.23 /bu	10.66 /bu	52.91 /t*	260.00 /t	0.33 /lb	110.23 /t	45.93 /t
Crop Sales (\$/acre)	587.92	555.25	694.07	598.80	431.09	496.41	639.60	1428.57	4030.00	759.21	440.92	551.16
Direct Expenses												
Seed, Cleaning & Treatment	27.84	27.06	32.00	21.00	23.75	28.13	55.43	196.00	367.17	49.51	22.56	19.60
Fertilizer (NPKS blend)	86.00 100-40-5-0	86.00 100-40-5-0	86.00 100-40-5-0	92.50 110-40-5-0	86.00 100-40-5-0	74.00 90-30-5-0	107.00 110-50-5-20	94.50 100-50-10-0	272.00 220-140-110-20	82.50 80-50-0-10	27.00 5-40-0-0	84.00 100-40-0-0
Chemical	44.74	44.74	44.74	44.74	22.58	44.74	38.39	44.96	572.06	42.94	2.27	13.84
Hail/Crop Insurance	12.42	16.37	15.39	10.49	12.23	12.23	19.06	10.03	0.00	50.68	0.00	0.00
Trucking & Marketing	43.12	47.91	47.91	52.70	42.16	36.41	23.96	105.62	159.17	22.45	96.82	35.21
Fuel, Oil & Lube	17.38	19.08	19.27	22.42	24.34	20.93	20.31	47.40	115.29	36.72	36.30	26.90
Machinery Repairs	28.87	26.59	29.38	26.84	28.11	28.67	29.38	53.18	131.69	63.31	34.44	18.74
Building Repairs	2.03	2.03	2.03	2.03	2.03	2.03	2.03	3.80	20.26	4.31	1.01	1.01
Irrigation: Pumping Costs	21.55	22.03	21.79	22.03	17.45	17.45	18.50	26.52	23.15	17.53	30.20	16.74
Custom Work	8.28	8.28	9.32	9.32	12.42	12.94	7.25	46.06	136.62	30.53	8.28	34.16
Labour (Paid and Unpaid)	30.72	31.74	32.00	31.74	34.82	34.82	31.74	76.80	307.20	70.14	34.82	35.84
Utilities & Miscellaneous	15.55	15.55	15.55	15.55	15.55	15.55	15.55	27.45	124.30	20.70	33.20	20.70
Operating Interest	7.36	7.32	7.55	7.34	6.14	6.81	9.32	15.57	56.20	8.12	2.40	5.45
Storage and/or Levies	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00	160.00	0.00	0.00	0.00
Total Direct Expense	345.86	354.71	362.93	358.70	327.57	334.69	377.90	767.88	2445.11	499.45	329.30	312.18
Contribution Margin	242.05	200.55	331.14	240.10	103.52	161.71	261.70	660.69	1584.89	259.76	111.62	238.98
Total Cost per Unit	6.36	5.82	5.90	5.32	5.04	5.91	10.08	37.22	173.05	0.32	134.15	43.29
Break-Even Yield	88.00 bu	105.00 bu	85.00 bu	108.00 bu	142.00 bu	108.00 bu	57.00 bu	19.00 t	10.30 t	2232.00 lbs	4.87 t	11.31 t

Capital Costs by Enterprise	Crops	Forages	Specialty
Crop Share/Cash Rent	128.65	123.05	133.56
Licenses and Insurance	44.75	27.97	46.46
Depreciation	96.87	100.79	103.59
Paid Capital Interest	19.37	13.45	25.30
Total Capital Costs	290.95	265.78	304.07
Adjusted Capital Costs	226.94	207.31	237.18

Questions?
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