

# AgriProfit\$

## 2015 Cropping Alternatives



### Economics & Competitiveness





## 2015 Cropping Alternatives Methodology

Prepared April 16, 2015

Rawlin Thangaraj, Economics Branch

### Disclaimer:

The following regional forecasts are based on the most current cost of production information from the AgriProfit\$ Business Analysis & Research Program and estimation 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 these regional benchmarks and forecasts. Producers are advised not to base cropping decisions solely on information provided in the following budgets. Alberta Agriculture's 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](http://www.agriculture.alberta.ca/cropchoices).

### Prices:

Expected market prices are estimates ONLY, which are based on forecasts for 2014 new crop. Prices in these budgets are estimated by Agriculture and Rural Development 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 AgriProfit\$, 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 a blend of fall 2014 and spring 2015 fertilizer prices to capture common practices, 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.

<b>Nitrogen</b>	\$0.62/lb actual N	(\$637.265/tonne for 46-0-0)
<b>Phosphorous</b>	\$0.56/lb actual P	(\$787.94/tonne for 11-51-0)
<b>Potassium</b>	\$0.45/lb actual K	(\$598.75/tonne for 0-0-60)
<b>Sulphur</b>	\$0.44/lb actual S	(\$513.75/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 Rural Development 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 \*.



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### **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 \$16-22/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:**

5% 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:**

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AFSC: Ken Handford

2015 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	24.00		1.75	21.00		1.75	21.00		2	24.00		1.75	21.00		2.25	27.00
cps wheat		2	22.00		1.75	19.25		1.75	19.25		2	22.00		1.75	19.25		2.25	24.75
durum wheat					1.75	22.75		1.75	22.75								2	26.00
soft white wheat																	2	20.80
winter wheat								2	22.40									
malt barley		2	20.80		1.75	18.20		2	20.80		2	20.80		1.75	18.20		2.5	26.00
feed barley		2	16.40		1.75	14.35		2	16.40		2	16.40		1.75	14.35		2.5	20.50
milling oats		2.5	12.50		2	10.00		2.25	11.25		2.25	11.25		2	10.00			
argentine canola	5		33.01	4		26.41	5		33.01	5		33.01	4		26.41	5		33.01
polish canola													4		26.41			
field pea		3	40.50		2.75	37.13		2.75	37.13		3	40.50		2.75	37.13			
yellow mustard				9		12.60	10		14.00									
chickpeas				120		45.61												
lentils				80		28.81												
flax							45		22.11									
sugar beets																10		124.82
potatoes																2000		367.17
dry beans																60		54.01
cereal silage		2.25	18.45					2	16.40		2.25	18.45		2	16.40		2.5	20.50
mixed hay	11		3.53	10		3.24	10		3.24	11		3.53	11		3.53			
alfalfa hay	10		10.63							10		10.63	10		10.63	14		14.88

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	6.00	23.00	13.80	0.00	0.00	0.00	0.00	0.00	0.00	6.00	23.00	8.63	6.00	23.00	8.63	6.00	23.00	17.25
cps wheat	6.00	23.00		0.00	0.00		0.00	0.00		6.00	23.00		6.00	23.00		6.00	23.00	
durum wheat				0.00	0.00	0.00	0.00	0.00	0.00							6.00	23.00	17.25
soft white wheat																6.00	23.00	17.25
winter wheat							0.00	0.00										
malt barley	6.00	23.00		0.00	0.00		0.00	0.00		6.00	23.00		6.00	23.00		6.00	23.00	17.25
feed barley	6.00	11.50		0.00	0.00		0.00	0.00		6.00	11.50		6.00	11.50		6.00	11.50	6.00
milling oats	6.00	7.00		0.00	0.00		6.00	7.00		6.00	7.00		6.00	7.00				
argentine canola	6.00	12.50		0.00	0.00		6.00	12.50		6.00	12.50		6.00	12.50		6.00	12.50	19.80
polish canola													6.00	12.00				
field pea	6.00	15.50	16.15	6.00	15.50	16.15	6.00	15.50	16.15	6.00	15.50	16.15	6.00	15.50				
yellow mustard				6.00	13.00		6.00	13.00										
chickpeas				12.25	7.00	19.79												
lentils				6.00	11.50	19.80												
flax							6.00	12.00										
sugar beets																6.00	16.00	24.38
potatoes																188.78	188.78	194.50
dry beans																6.00	14.00	24.38
cereal silage	6.00	7.00					6.00	7.00		6.00	7.00		6.00	7.00		6.00	7.00	
mixed hay	1.50			1.50			1.50			1.50			1.50					
alfalfa hay	1.88									1.88			1.88			2.25		

## 2015 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					
<b>Value of Production</b>					
<b>Direct Expenses:</b>					
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					
<b>Total Direct Expense</b>					
<b>Contribution Margin</b>					
Cash/Share Rent & Land Lease					
Taxes, Licenses & Insurance					
Water Rates (Irrigation only)					
Depreciation & Lease Payments					
Paid Capital Interest					
<b>Total Capital Costs</b>					
<b>Return to Mgmt &amp; Equity</b>					
<b>Break-Even Yield</b>					
<b>Break-Even Price</b>					

## 2015 Cropping Alternatives

### 2015 Production Costs and Returns (\$/acre)

### Black Soils

#### Stubble Seeded Crops

<i>AgriProfit</i> \$	Spring Wheat	CPS Wheat	Feed Barley	Malt Barley	Milling Oats	Argentine HT Canola	Field Peas	Mixed Hay	Alfalfa Hay	Cereal Silage
	2 CWRS 11.5%	1 CPSR	1 CW	Select CW 2R	3 CW	1 CAN	2 CAN			
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	6.00 /bu	5.50 /bu	4.10 /bu	5.20 /bu	2.50 /bu	10.00 /bu	6.75 /bu	72.91 /t	97.20 /t	49.20 /t
<b>Crop Sales (\$/acre)</b>	<b>390.00</b>	<b>412.50</b>	<b>368.99</b>	<b>390.01</b>	<b>287.50</b>	<b>450.00</b>	<b>337.51</b>	<b>164.04</b>	<b>243.00</b>	<b>319.79</b>
<b>Direct Expenses:</b>										
Seed, Cleaning & Treatment	24.00	22.00	16.40	20.80	12.50	33.01	40.50	3.53	10.63	18.45
Fertilizer (NPKS blend)	72.00 80-30-10-0	72.00 80-30-10-0	72.00 80-30-10-0	74.50 70-30-20-10	61.00 70-30-0-0	101.00 100-40-15-20	27.00 5-30-15-0	18.00 15-15-0-0	17.50 5-25-0-0	55.00 65-25-0-0
Chemical	42.80 *	42.80 *	17.50	42.80 *	13.00	34.34 *	37.65 *	1.50	1.88	13.00
Hail/Crop Insurance	12.92	14.69	13.24	13.24	15.07	15.81	19.28	0.00	0.00	0.00
Trucking & Marketing	36.52	42.14	40.46	33.71	36.62	21.07	28.09	57.47	63.86	20.12
Fuel, Oil & Lube	18.11	16.40	17.13	18.84	11.99	18.60	23.49	7.83	4.89	30.84
Machinery Repairs	17.57	17.32	11.72	17.06	11.72	15.54	18.08	15.28	7.13	11.21
Building Repairs	2.00	5.01	2.00	5.51	2.75	2.25	4.51	5.01	3.00	3.51
Custom Work	2.10	2.10	2.37	3.16	15.25	2.63	8.68	2.10	4.73	5.26
Labour (Paid and Unpaid)	18.58	22.70	14.96	24.25	20.12	19.09	22.70	25.80	11.35	33.02
Utilities & Miscellaneous	11.95	11.95	11.95	11.95	11.95	14.55	14.55	7.25	7.25	8.30
Operating Interest	6.94	6.84	5.29	6.91	4.33	8.42	5.26	1.15	1.50	4.32
<b>Total Direct Expense</b>	<b>265.50</b>	<b>275.96</b>	<b>225.02</b>	<b>272.74</b>	<b>216.30</b>	<b>286.31</b>	<b>249.80</b>	<b>144.93</b>	<b>133.72</b>	<b>203.03</b>
<b>Contribution Margin</b>	<b>124.50</b>	<b>136.54</b>	<b>143.97</b>	<b>117.27</b>	<b>71.20</b>	<b>163.69</b>	<b>87.71</b>	<b>19.11</b>	<b>109.28</b>	<b>116.77</b>

<b>Total Cost per Unit</b>	<b>5.56</b>	<b>4.96</b>	<b>3.56</b>	<b>4.91</b>	<b>2.71</b>	<b>8.49</b>	<b>6.91</b>	<b>100.68</b>	<b>86.13</b>	<b>43.79</b>
<b>Break-Even Yield</b>	<b>61.00 bu</b>	<b>68.00 bu</b>	<b>79.00 bu</b>	<b>71.00 bu</b>	<b>125.00 bu</b>	<b>39.00 bu</b>	<b>52.00 bu</b>	<b>3.11 t</b>	<b>2.22 t</b>	<b>5.79 t</b>

Capital Costs by Enterprise	Crops	Forages
Crop Share/Cash Rent	60.39	48.20
Licenses and Insurance	12.78	6.39
Depreciation	42.70	45.37
Paid Capital Interest	6.97	4.65
<b>Total Capital Costs</b>	<b>122.84</b>	<b>104.61</b>
Adjusted Capital Costs	95.82	81.59

#### Questions?

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Note: Please refer to 2015 Methodology on AARD website.

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2015 Cropping Alternatives

2015 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	900.00 lbs	1200.00 lbs	750.00 lbs	1.50 t	0.00
Expected Market Price	6.50 /bu	5.50 /bu	7.00 /bu	4.10 /bu	5.20 /bu	2.50 /bu	10.00 /bu	6.75 /lb	0.24 /lb	0.19 /lb	0.35 /lb	72.91 /t	0.00
<b>Crop Sales (\$/acre)</b>	<b>260.00</b>	<b>247.50</b>	<b>280.00</b>	<b>266.50</b>	<b>260.00</b>	<b>187.50</b>	<b>250.00</b>	<b>270.01</b>	<b>216.06</b>	<b>228.06</b>	<b>262.57</b>	<b>109.36</b>	<b>0.00</b>
<b>Direct Expenses:</b>													
Seed, Cleaning & Treatment	21.00	19.25	22.75	14.35	18.20	10.00	26.41	37.13	28.81	45.61	12.60	3.24	0.00
Fertilizer (NPKS blend)	45.00 50-20-5-0	45.00 50-20-5-0	45.00 50-20-5-0	54.00 60-25-5-0	57.50 50-30-10-10	42.50 50-20-0-0	64.00 65-25-10-10	19.00 5-20-10-0	14.50 5-20-0-0	20.00 5-30-0-0	41.00 40-20-0-10	12.00 10-10-0-0	0.00
Chemical	32.86 *	32.86 *	32.86 *	14.00	36.97 *	11.70	29.12 *	37.65 *	37.30 *	39.04 *	19.00	1.50	18.00
Hail/Crop Insurance	13.38	16.86	16.30	13.49	13.49	13.11	25.47	16.39	25.94	21.97	16.96	0.00	0.00
Trucking & Marketing	22.48	25.28	22.48	29.22	22.48	23.88	11.71	22.48	9.27	12.36	7.73	38.31	0.00
Fuel, Oil & Lube	12.70	11.88	11.98	12.73	13.18	12.94	13.18	12.48	11.26	13.46	12.73	6.61	7.10
Machinery Repairs	15.03	11.46	12.23	8.66	8.15	10.19	8.15	10.95	8.15	9.17	8.66	10.19	9.17
Building Repairs	1.50	2.50	1.25	1.00	1.00	2.50	1.50	2.25	2.75	2.00	1.00	3.00	1.00
Custom Work	4.21	1.58	3.68	4.21	2.63	2.63	8.42	2.10	2.10	4.21	3.16	2.10	0.00
Labour (Paid and Unpaid)	21.67	18.06	18.06	16.51	16.51	14.45	19.09	13.67	13.42	15.48	13.93	16.51	10.32
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	4.94	4.86	5.03	4.12	5.63	3.21	5.98	4.69	4.03	5.23	3.63	0.84	0.90
<b>Total Direct Expense</b>	<b>206.72</b>	<b>201.55</b>	<b>201.97</b>	<b>182.63</b>	<b>206.09</b>	<b>154.36</b>	<b>223.37</b>	<b>189.14</b>	<b>165.28</b>	<b>197.39</b>	<b>148.69</b>	<b>100.55</b>	<b>49.49</b>
<b>Contribution Margin</b>	<b>53.28</b>	<b>45.95</b>	<b>78.03</b>	<b>83.86</b>	<b>53.92</b>	<b>33.14</b>	<b>26.63</b>	<b>80.86</b>	<b>50.78</b>	<b>30.67</b>	<b>113.88</b>	<b>8.80</b>	<b>(49.49)</b>

<b>Total Cost per Unit</b>	<b>6.82</b>	<b>5.94</b>	<b>6.70</b>	<b>3.82</b>	<b>5.44</b>	<b>2.94</b>	<b>11.57</b>	<b>6.38</b>	<b>0.26</b>	<b>0.22</b>	<b>0.29</b>	<b>105.66</b>	<b>N/A</b>
<b>Break-Even Yield</b>	<b>42.00 bu</b>	<b>49.00 bu</b>	<b>39.00 bu</b>	<b>61.00 bu</b>	<b>53.00 bu</b>	<b>89.00 bu</b>	<b>29.00 bu</b>	<b>38.00 bu</b>	<b>964.00 lbs</b>	<b>1386.00 lbs</b>	<b>614.00 lbs</b>	<b>2.17 t</b>	<b>N/A</b>

Capital Costs by Enterprise	Crops	Forages
Crop Share/Cash Rent	40.65	32.52
Licenses and Insurance	6.39	9.29
Depreciation	25.62	29.36
Paid Capital Interest	11.87	3.10
<b>Total Capital Costs</b>	<b>84.53</b>	<b>74.27</b>
Adjusted Capital Costs	65.94	57.93

Questions?  
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 Note: Please refer to 2015 Methodology on AARD website.

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2015 Cropping Alternatives

2015 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	Summer Fallow
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	0.00
Expected Market Price	6.50 /bu	5.50 /bu	7.00 /bu	5.60 /bu	4.10 /bu	5.20 /bu	2.50 /bu	10.00 /bu	6.75 /bu	11.00 /bu	0.35 /lb	72.91 /t	49.20 /t	0.00
<b>Crop Sales (\$/acre)</b>	<b>292.50</b>	<b>275.00</b>	<b>315.00</b>	<b>279.99</b>	<b>287.00</b>	<b>286.00</b>	<b>212.50</b>	<b>300.00</b>	<b>303.76</b>	<b>220.00</b>	<b>297.58</b>	<b>127.58</b>	<b>246.00</b>	<b>0.00</b>
<b>Direct Expenses:</b>														
Seed, Cleaning & Treatment	21.00	19.25	22.75	22.40	16.40	20.80	11.25	33.01	37.13	22.11	14.00	3.24	16.40	0.00
Fertilizer (NPKS blend)	54.00 60-25-5-0	54.00 60-25-5-0	54.00 60-25-5-0	54.00 60-25-5-0	60.50 70-25-5-0	66.00 60-30-15-10	46.00 55-20-0-0	75.00 75-30-10-15	19.00 5-20-10-0	42.50 50-20-0-0	50.00 50-25-0-10	15.00 10-15-0-0	49.00 60-20-0-0	0.00
Chemical	36.97 *	36.97 *	36.97 *	11.70 *	14.00	36.97 *	13.00	32.36 *	37.65 *	18.00 *	19.00	1.50	13.00	18.00
Hail/Crop Insurance	13.55	17.03	16.46	12.62	12.04	12.04	11.24	22.37	16.39	19.71	17.34	0.00	0.00	0.00
Trucking & Marketing	25.28	28.09	25.28	28.09	31.47	24.72	27.06	14.05	25.28	10.49	8.76	44.70	15.48	0.00
Fuel, Oil & Lube	10.91	12.83	13.05	12.66	12.24	13.39	10.78	13.35	13.48	9.84	12.73	8.61	12.73	8.32
Machinery Repairs	12.48	12.74	11.21	12.23	12.23	12.74	11.21	15.28	13.75	11.21	11.21	9.68	7.13	8.15
Building Repairs	1.00	1.50	1.00	1.00	2.00	2.50	1.00	1.50	1.75	1.50	1.50	2.50	1.25	1.50
Custom Work	2.10	3.16	3.16	3.16	6.31	6.31	2.10	5.26	3.16	8.42	4.73	9.99	42.08	0.00
Labour (Paid and Unpaid)	12.90	13.42	11.87	12.90	12.64	13.42	13.42	14.45	12.64	14.96	13.93	10.32	10.32	10.32
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	5.60	5.51	5.69	4.40	4.54	6.19	3.51	7.02	4.69	4.13	4.15	0.99	3.92	0.90
<b>Total Direct Expense</b>	<b>207.75</b>	<b>216.45</b>	<b>211.78</b>	<b>185.51</b>	<b>194.72</b>	<b>225.43</b>	<b>157.83</b>	<b>243.99</b>	<b>195.27</b>	<b>173.21</b>	<b>167.70</b>	<b>113.78</b>	<b>179.61</b>	<b>47.19</b>
<b>Contribution Margin</b>	<b>84.75</b>	<b>58.55</b>	<b>103.22</b>	<b>94.48</b>	<b>92.28</b>	<b>60.58</b>	<b>54.67</b>	<b>56.01</b>	<b>108.49</b>	<b>46.79</b>	<b>129.88</b>	<b>13.80</b>	<b>66.39</b>	<b>(47.19)</b>

<b>Total Cost per Unit</b>	<b>6.55</b>	<b>6.07</b>	<b>6.64</b>	<b>5.45</b>	<b>4.02</b>	<b>5.68</b>	<b>2.88</b>	<b>11.03</b>	<b>6.27</b>	<b>13.01</b>	<b>0.30</b>	<b>94.66</b>	<b>46.29</b>	<b>N/A</b>
<b>Break-Even Yield</b>	<b>46.00 bu</b>	<b>56.00 bu</b>	<b>43.00 bu</b>	<b>49.00 bu</b>	<b>69.00 bu</b>	<b>61.00 bu</b>	<b>98.00 bu</b>	<b>34.00 bu</b>	<b>42.00 bu</b>	<b>24.00 bu</b>	<b>728.00 lbs</b>	<b>2.27 t</b>	<b>4.70 t</b>	<b>N/A</b>

Capital Costs by Enterprise	Crops	Forages
Crop Share/Cash Rent	73.17	30.20
Licenses and Insurance	5.52	5.81
Depreciation	26.69	16.55
Paid Capital Interest	6.20	13.94
<b>Total Capital Costs</b>	<b>111.57</b>	<b>66.49</b>
Adjusted Capital Costs	87.03	51.86

Questions?  
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 Note: Please refer to 2015 Methodology on AARD website.

Prepared April 16, 2015



## 2015 Cropping Alternatives

### 2015 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	6.00 /bu	5.50 /bu	4.10 /bu	5.20 /bu	2.50 /bu	10.00 /bu	6.75 /bu	97.20 /t	72.91 /t	49.20 /t
<b>Crop Sales (\$/acre)</b>	<b>390.00</b>	<b>412.50</b>	<b>368.99</b>	<b>390.01</b>	<b>287.50</b>	<b>450.00</b>	<b>337.51</b>	<b>218.70</b>	<b>182.26</b>	<b>319.79</b>
<b>Direct Expenses:</b>										
Seed, Cleaning & Treatment	24.00	22.00	16.40	20.80	11.25	33.01	40.50	10.63	3.53	18.45
Fertilizer (NPKS blend)	69.00 80-25-10-0	69.00 80-25-10-0	72.00 80-30-10-0	71.50 70-25-25-5	61.50 75-25-0-0	105.50 100-40-25-20	24.00 5-25-15-0	17.50 5-25-0-0	21.00 20-15-0-0	58.00 70-25-0-0
Chemical	37.63 *	37.63 *	17.50	37.63 *	13.00	28.40 *	37.65 *	1.88	1.50	13.00
Hail/Crop Insurance	20.16	21.22	16.93	16.93	17.27	21.69	19.28	0.00	0.00	0.00
Trucking & Marketing	36.52	42.14	40.46	33.71	36.62	21.07	28.09	57.47	63.86	20.12
Fuel, Oil & Lube	18.96	16.99	18.11	16.69	20.56	20.80	21.54	9.79	11.75	20.56
Machinery Repairs	17.32	15.03	14.26	17.32	13.24	22.92	20.63	7.64	11.72	15.54
Building Repairs	1.00	2.50	2.50	2.00	3.51	2.00	3.51	1.50	1.00	1.00
Custom Work	5.26	5.52	5.79	5.79	7.36	5.79	5.26	17.88	5.79	36.82
Labour (Paid and Unpaid)	22.19	21.16	21.67	20.38	21.67	24.77	23.48	18.06	19.09	21.67
Utilities & Miscellaneous	11.95	11.95	11.95	11.95	11.95	14.55	14.55	7.25	6.75	8.30
Operating Interest	6.53	6.43	5.29	6.50	4.29	8.35	5.11	1.50	1.30	4.47
<b>Total Direct Expense</b>	<b>270.52</b>	<b>271.57</b>	<b>242.87</b>	<b>261.20</b>	<b>222.22</b>	<b>308.85</b>	<b>243.59</b>	<b>151.10</b>	<b>147.28</b>	<b>217.93</b>
<b>Contribution Margin</b>	<b>119.48</b>	<b>140.93</b>	<b>126.13</b>	<b>128.81</b>	<b>65.28</b>	<b>141.15</b>	<b>93.91</b>	<b>67.60</b>	<b>34.98</b>	<b>101.86</b>

<b>Total Cost per Unit</b>	<b>5.87</b>	<b>5.10</b>	<b>3.93</b>	<b>4.96</b>	<b>2.90</b>	<b>9.33</b>	<b>7.09</b>	<b>90.08</b>	<b>79.55</b>	<b>41.46</b>
<b>Break-Even Yield</b>	<b>64.00 bu</b>	<b>70.00 bu</b>	<b>87.00 bu</b>	<b>72.00 bu</b>	<b>134.00 bu</b>	<b>42.00 bu</b>	<b>53.00 bu</b>	<b>2.09 t</b>	<b>2.73 t</b>	<b>5.48 t</b>

Capital Costs by Enterprise	Crops	Forages
Crop Share/Cash Rent	59.23	29.04
Licenses and Insurance	12.19	5.23
Depreciation	49.11	27.22
Paid Capital Interest	21.68	4.65
<b>Total Capital Costs</b>	<b>142.22</b>	<b>66.13</b>
Adjusted Capital Costs	110.93	51.58

#### Questions?

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Alberta Agriculture and Rural Development

Note: Please refer to 2015 Methodology on AARD website.

Prepared April 16, 2015

2015 Cropping Alternatives

2015 Production Costs and Returns (\$/acre)

Grey-Wooded (Peace Region)

Stubble Seeded Crops

<i>AgriProfit</i> \$	Spring Wheat <small>2 CWRS 11.5%</small>	CPS Wheat <small>1 CPSR</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>	Polish Canola <small>1 CAN</small>	Field Peas <small>2 CAN</small>	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	5.40 /bu	5.50 /bu	4.10 /bu	5.20 /bu	2.50 /bu	10.00 /bu	10.00 /bu	6.75 /bu	72.91 /t	97.20 /t	49.20 /t
<b>Crop Sales (\$/acre)</b>	<b>297.01</b>	<b>357.50</b>	<b>327.99</b>	<b>364.01</b>	<b>250.00</b>	<b>400.00</b>	<b>300.00</b>	<b>303.76</b>	<b>127.58</b>	<b>194.40</b>	<b>295.20</b>
<b>Direct Expenses</b>											
Seed, Cleaning & Treatment	21.00	19.25	14.35	18.20	10.00	26.41	26.41	37.13	3.53	10.63	16.40
Fertilizer (NPKS blend)	60.50 70-25-5-0	60.50 70-25-5-0	60.50 70-25-5-0	61.00 60-25-15-5	52.00 65-20-0-0	86.00 85-30-20-15	62.00 70-20-5-10	21.00 5-20-15-0	18.00 20-15-0-0	14.50 5-20-0-0	58.00 70-25-0-0
Chemical	37.63 *	37.63 *	17.50	37.63 *	13.00	28.40 *	18.00	37.65 *	1.50	1.88	13.00
Hail/Crop Insurance	16.56	18.22	14.13	14.13	18.80	20.08	12.55	19.28	0.00	19.39	11.14
Trucking & Marketing	30.90	36.52	35.96	31.47	31.84	18.73	14.05	25.28	44.70	51.08	18.58
Fuel, Oil & Lube	10.21	10.49	10.92	12.71	11.75	12.88	11.98	13.08	13.92	14.68	21.54
Machinery Repairs	12.23	12.23	11.21	12.23	12.74	12.74	12.23	13.24	10.19	8.15	10.19
Building Repairs	3.76	3.00	2.00	2.00	2.50	4.26	2.00	3.00	1.50	1.00	1.50
Custom Work	3.16	3.16	6.31	6.58	4.73	3.68	2.89	5.26	0.00	0.00	40.50
Labour (Paid and Unpaid)	18.58	18.58	17.54	19.09	17.54	19.61	17.03	15.48	10.84	10.32	11.35
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	5.96	5.87	4.62	5.84	3.75	7.04	5.32	4.79	1.15	1.35	4.37
<b>Total Direct Expense</b>	<b>232.42</b>	<b>237.39</b>	<b>207.00</b>	<b>232.82</b>	<b>190.60</b>	<b>254.37</b>	<b>194.80</b>	<b>205.55</b>	<b>112.08</b>	<b>139.73</b>	<b>213.32</b>
<b>Contribution Margin</b>	<b>64.59</b>	<b>120.11</b>	<b>121.00</b>	<b>131.19</b>	<b>59.40</b>	<b>145.63</b>	<b>105.20</b>	<b>98.21</b>	<b>15.50</b>	<b>54.67</b>	<b>81.88</b>

<b>Total Cost per Unit</b>	<b>5.85</b>	<b>5.03</b>	<b>3.71</b>	<b>4.60</b>	<b>2.80</b>	<b>8.60</b>	<b>9.48</b>	<b>6.56</b>	<b>87.36</b>	<b>90.26</b>	<b>42.35</b>
<b>Break-Even Yield</b>	<b>60.00 bu</b>	<b>60.00 bu</b>	<b>73.00 bu</b>	<b>62.00 bu</b>	<b>113.00 bu</b>	<b>35.00 bu</b>	<b>29.00 bu</b>	<b>44.00 bu</b>	<b>2.10 t</b>	<b>1.86 t</b>	<b>5.16 t</b>

Capital Costs by Enterprise	Crops	Forages
Crop Share/Cash Rent	47.62	23.81
Licenses and Insurance	10.45	4.65
Depreciation	43.77	18.68
Paid Capital Interest	12.91	5.16
<b>Total Capital Costs</b>	<b>114.75</b>	<b>52.30</b>
Adjusted Capital Costs	89.51	40.79

Questions?  
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2015 Cropping Alternatives

2015 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	6.50 /bu	5.50 /bu	7.00 /bu	5.00 /bu	4.10 /bu	5.20 /bu	10.00 /bu	52.00 /t*	260.00 /t	0.36 /lb	97.20 /t	49.20 /t
<b>Crop Sales (\$/acre)</b>	<b>585.00</b>	<b>550.00</b>	<b>700.00</b>	<b>550.00</b>	<b>450.99</b>	<b>494.01</b>	<b>600.00</b>	<b>1404.00</b>	<b>4030.00</b>	<b>828.23</b>	<b>388.80</b>	<b>590.39</b>
<b>Direct Expenses</b>												
Seed, Cleaning & Treatment	27.00	24.75	26.00	20.80	20.50	26.00	33.01	146.60	367.17	54.01	14.88	20.50
Fertilizer (NPKS blend)	87.50 100-40-5-0	87.50 100-40-5-0	87.50 100-40-5-0	94.00 110-40-5-0	87.50 100-40-5-0	76.00 90-30-5-0	108.50 110-50-5-20	95.50 100-50-10-0	276.00 220-140-110-20	83.00 80-50-0-10	26.00 5-40-0-0	85.50 100-40-0-0
Chemical	46.25 *	46.25 *	46.25 *	46.25 *	23.50 *	46.25 *	38.30 *	46.38 *	572.06 *	44.38 *	2.25	13.00
Hail/Crop Insurance	17.75	18.74	25.05	19.65	15.09	15.09	20.99	10.13	0.00	51.19	0.00	0.00
Trucking & Marketing	50.57	56.19	56.19	61.81	49.45	42.70	28.09	111.46	167.96	23.69	102.17	37.15
Fuel, Oil & Lube	22.84	25.08	25.32	25.70	27.90	27.50	26.69	54.33	132.15	42.09	41.60	30.84
Machinery Repairs	29.04	26.74	29.55	27.00	28.27	29.00	29.55	53.49	132.44	63.68	34.64	18.85
Building Repairs	2.00	2.00	2.00	2.00	2.00	2.00	2.00	3.76	20.03	4.26	1.00	1.00
Irrigation: Pumping Costs	15.25	15.00	14.75	15.00	15.00	15.00	16.00	33.00	52.80	20.00	20.00	25.00
Custom Work	8.42	8.42	9.47	9.47	12.62	13.15	7.36	46.81	138.86	31.03	8.42	34.72
Labour (Paid and Unpaid)	30.96	31.99	32.25	31.99	35.09	35.09	31.99	77.40	309.60	70.69	35.09	36.12
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	8.04	7.93	7.99	8.05	6.57	7.41	8.99	14.42	60.76	9.07	2.16	5.95
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
<b>Total Direct Expense</b>	<b>361.17</b>	<b>366.14</b>	<b>377.87</b>	<b>377.27</b>	<b>339.05</b>	<b>350.75</b>	<b>367.03</b>	<b>740.72</b>	<b>2514.14</b>	<b>517.79</b>	<b>321.40</b>	<b>329.32</b>
<b>Contribution Margin</b>	<b>223.83</b>	<b>183.86</b>	<b>322.13</b>	<b>172.73</b>	<b>111.95</b>	<b>143.26</b>	<b>232.97</b>	<b>663.28</b>	<b>1515.86</b>	<b>310.44</b>	<b>67.40</b>	<b>261.07</b>
<b>Total Cost per Unit</b>	<b>6.53</b>	<b>5.93</b>	<b>6.05</b>	<b>5.49</b>	<b>5.15</b>	<b>6.08</b>	<b>9.90</b>	<b>36.22</b>	<b>177.50</b>	<b>0.33</b>	<b>132.18</b>	<b>44.72</b>
<b>Break-Even Yield</b>	<b>91.00 bu</b>	<b>108.00 bu</b>	<b>87.00 bu</b>	<b>121.00 bu</b>	<b>139.00 bu</b>	<b>112.00 bu</b>	<b>60.00 bu</b>	<b>19.00 t</b>	<b>10.60 t</b>	<b>2097.00 lbs</b>	<b>5.44 t</b>	<b>10.91 t</b>

Capital Costs by Enterprise	Crops	Forages	Specialty
Crop Share/Cash Rent	133.56	127.76	133.56
Licenses and Insurance	46.46	29.04	46.46
Depreciation	92.35	96.09	98.75
Paid Capital Interest	18.59	12.91	25.30
<b>Total Capital Costs</b>	<b>290.95</b>	<b>265.78</b>	<b>304.07</b>
Adjusted Capital Costs	226.94	207.31	237.18

Questions?  
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