
2024 Cost of Production Crops



Guidelines For Estimating Crop Production Costs - 2024

Date: January, 2024

The following budgets are estimates of the cost of producing the most commonly grown field crops in Manitoba. General Manitoba Agriculture recommendations are assumed in using fertilizers and chemical inputs. These figures provide an economic evaluation of the crops and estimated yields required to cover all costs. Costs include labour, investment and depreciation, but do not include management costs, nor do they necessarily represent the average cost of production in Manitoba.

These budgets may be adjusted by putting in your own figures. As a producer you are encouraged to calculate your own costs of production for various crops. On each farm, costs and yields differ due to soil type, climate and agronomic practices.

This tool is available as an Excel worksheet at:



[The Farm Machinery Custom and Rental Rate Guide](#) is also available to help determine machinery costs.

The [CropPlan Production Cost Calculator](#) is also available for producers to estimate the cash cost of producing field crops on their farm on an annual basis. CropPlan calculates marginal returns, breakeven yields, breakeven crop prices on total production and remaining unsold inventory, land and machinery cost analysis and cash based financial ratios.

Contact Us

For more information, contact a Farm Management Specialist.

- manitoba.ca/agriculture
- mbfarmbusiness@gov.mb.ca
- 1-844-769-6224

Note: This budget is only a guide and is not intended as an in depth study of the cost of production of this industry. Interpretation and use of this information is the responsibility of the user. If you need help with a budget, contact a Farm Management Specialist.

Crop Production Costs 2024 Guidelines (Dollars Per Acre)								
	Wheat - Hard Red Spring	Wheat - Northern Hard Red	Wheat - Prairie Spring	Wheat - Winter	Oats	Barley	Hybrid Fall Rye	Corn
A. Operating Costs								
Seed & Treatment	\$36.00	\$36.00	\$36.00	\$34.00	\$25.00	\$24.00	\$82.40	\$102.00
Fertilizer	\$124.44	\$136.29	\$128.39	\$124.44	\$91.21	\$93.08	\$152.08	\$177.00
Crop Protection	\$61.81	\$61.81	\$61.81	\$41.54	\$23.13	\$50.13	\$8.38	\$32.00
Fuel	\$38.14	\$38.83	\$38.28	\$38.14	\$44.98	\$41.74	\$38.79	\$46.59
Machinery Operating & Lease	\$25.00	\$25.00	\$25.00	\$25.00	\$25.00	\$25.00	\$25.00	\$25.00
Labour - Hired	\$5.40	\$5.40	\$5.40	\$5.40	\$5.40	\$5.40	\$5.40	\$5.40
Crop Insurance	\$13.52	\$16.41	\$12.45	\$13.98	\$21.02	\$18.96	\$18.50	\$50.70
Hail Insurance	\$11.80	\$11.80	\$11.80	\$11.80	\$11.80	\$11.80	\$11.80	\$11.80
Drying & Other Costs	\$17.75	\$17.75	\$17.75	\$17.75	\$17.75	\$17.75	\$17.75	\$87.75
Land Taxes	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00
Storage Costs	\$17.88	\$19.25	\$18.15	\$17.88	\$31.63	\$21.45	\$22.00	\$37.13
Interest on Operating	\$16.73	\$17.48	\$16.88	\$15.75	\$14.26	\$14.82	\$18.09	\$26.79
Total Operating	\$388.46	\$406.01	\$391.90	\$365.67	\$331.16	\$344.13	\$420.19	\$622.15
B. Fixed Costs								
Land Costs	\$101.43	\$101.43	\$101.43	\$101.43	\$101.43	\$101.43	\$101.43	\$101.43
Machinery Costs	\$89.15	\$89.15	\$89.15	\$89.15	\$89.15	\$89.15	\$89.15	\$109.03
Total Fixed	\$190.58	\$190.58	\$190.58	\$190.58	\$190.58	\$190.58	\$190.58	\$210.46
C. Owners - Labour & Living								
	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00
Total Costs	\$606.04	\$623.59	\$609.48	\$583.25	\$548.74	\$561.71	\$637.77	\$859.61

Profitability Analysis

Estimated Farmgate								
Target Price \$ per unit	\$9.25	\$8.75	\$8.75	\$8.00	\$5.00	\$6.25	\$6.50	\$6.25
Premium \$ per unit	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Target Yield per acre	65	70	66	65	115	78	80	135
Unit type (bu. or lb.)	bu	bu	bu	bu	bu	bu	bu	bu
Gross Revenue / acre	\$601.25	\$612.50	\$577.50	\$520.00	\$575.00	\$487.50	\$520.00	\$843.75
Operating Expense Ratio	64.6%	66.3%	67.9%	70.3%	57.6%	70.6%	80.8%	73.7%
Marginal Returns								
Over Operating Costs	\$212.79	\$206.49	\$185.60	\$154.33	\$243.84	\$143.37	\$99.81	\$221.60
Over Total Costs (Net Profit)	(\$4.79)	(\$11.09)	(\$31.98)	(\$63.25)	\$26.26	(\$74.21)	(\$117.77)	(\$15.86)
Profitability Ranking	7	8	10	11	6	12	14	9
Return on Investment (ROI)	(0.79%)	(1.78%)	(5.25%)	(10.84%)	4.79%	(13.21%)	(18.47%)	(1.85%)
Return on Asset (ROA)	3.10%	2.97%	2.55%	1.92%	3.73%	1.70%	0.82%	3.28%

Breakeven Analysis

Breakeven Price Per Unit								
Over Operating Costs	\$5.98	\$5.80	\$5.94	\$5.63	\$2.88	\$4.41	\$5.25	\$4.61
Over Land Costs	\$1.56	\$1.45	\$1.54	\$1.56	\$0.88	\$1.30	\$1.27	\$0.75
Over Machinery Costs	\$1.37	\$1.27	\$1.35	\$1.37	\$0.78	\$1.14	\$1.11	\$0.81
Over Owners Labour & Living	\$0.42	\$0.39	\$0.41	\$0.42	\$0.23	\$0.35	\$0.34	\$0.20
Over Total Costs	\$9.32	\$8.91	\$9.23	\$8.97	\$4.77	\$7.20	\$7.97	\$6.37
Breakeven Yield (Bu or lb.)								
Over Operating Costs	42.0	46.4	44.8	45.7	66.2	55.1	64.6	100
Over Land Costs	11.0	11.6	11.6	12.7	20.3	16.2	15.6	16.2
Over Machinery Costs	9.6	10.2	10.2	11.1	17.8	14.3	13.7	17.4
Over Owners Labour & Living	2.9	3.1	3.1	3.4	5.4	4.3	4.2	4.3
Over Total Costs	65.5	71.3	69.7	72.9	109.7	89.9	98.1	137.9
Breakeven Yield Risk Ratio	99%	98%	95%	89%	105%	87%	82%	98%
(Target Yield per Acre / BE Yield)								

Note: This budget is only a guide and is not intended as an in depth study of the cost of production of this industry. Interpretation and utilization of this information is the responsibility of the user.

Crop Production Costs Guidelines (Dollars Per Acre)

	Sunflower -		Peas	Beans - Pinto	Beans - White	Beans - Black		
	Canola	Soybeans					Oilseed	Flaxseed
A. Operating Costs								
Seed & Treatment	\$80.00	\$90.00	\$50.00	\$64.00	\$88.00	\$116.00	\$112.00	\$118.00
Fertilizer	\$142.10	\$42.23	\$116.14	\$62.46	\$28.13	\$78.26	\$86.16	\$86.16
Crop Protection	\$66.76	\$23.58	\$47.52	\$32.26	\$46.00	\$129.78	\$129.78	\$129.78
Fuel	\$37.93	\$33.05	\$39.07	\$36.32	\$33.15	\$32.61	\$32.15	\$32.15
Machinery Operating & Lease	\$25.00	\$25.00	\$38.00	\$25.00	\$25.00	\$50.00	\$50.00	\$50.00
Labour - Hired	\$5.40	\$5.40	\$5.40	\$5.40	\$5.40	\$5.40	\$5.40	\$5.40
Crop Insurance	\$17.50	\$25.95	\$27.35	\$21.70	\$19.66	\$39.01	\$40.82	\$46.86
Hail Insurance	\$11.80	\$15.34	\$11.80	\$11.80	\$23.60	\$20.65	\$20.65	\$20.65
Drying & Other Costs	\$17.75	\$17.75	\$27.75	\$17.75	\$17.75	\$17.75	\$17.75	\$17.75
Land Taxes	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00
Storage Costs	\$12.38	\$10.45	\$22.00	\$6.88	\$13.75	\$8.71	\$7.79	\$7.79
Interest on Operating	\$19.65	\$13.89	\$18.23	\$13.66	\$14.42	\$23.32	\$23.51	\$24.05
Total Operating	\$456.26	\$322.64	\$423.26	\$317.22	\$334.86	\$541.49	\$546.01	\$558.59
B. Fixed Costs								
Land Costs	\$101.43	\$101.43	\$101.43	\$101.43	\$101.43	\$101.43	\$101.43	\$101.43
Machinery Costs	\$89.15	\$89.15	\$109.03	\$89.15	\$89.15	\$109.03	\$109.03	\$109.03
Total Fixed	\$190.58	\$190.58	\$210.46	\$190.58	\$190.58	\$210.46	\$210.46	\$210.46
C. Owners - Labour & Living	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00
Total Costs	\$673.83	\$540.22	\$660.72	\$534.80	\$552.44	\$778.95	\$783.48	\$796.06

Profitability Analysis

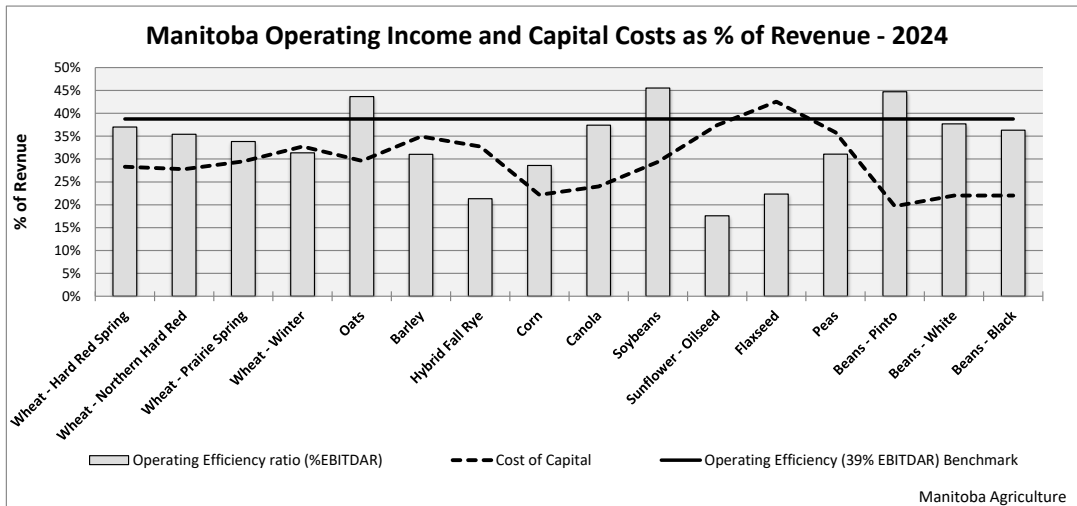
Estimated Farmgate								
Target Price \$ per unit	\$15.75	\$15.25	\$0.25	\$16.00	\$9.50	\$0.50	\$0.50	\$0.50
Premium \$ per unit	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Target Yield per acre	45	38	2,000	25	50	1,900	1,700	1,700
Unit type (bu. or lb.)	bu	bu	lb	bu	bu	lb	lb	lb
Gross Revenue / acre	\$708.75	\$579.50	\$500.00	\$400.00	\$475.00	\$950.00	\$850.00	\$850.00
Operating Expense Ratio	64.4%	55.7%	84.7%	79.3%	70.5%	57.0%	64.2%	65.7%
Marginal Returns								
Over Operating Costs	\$252.49	\$256.86	\$76.74	\$82.78	\$140.14	\$408.51	\$303.99	\$291.41
Over Total Costs (Net Profit)	\$34.92	\$39.28	(\$160.72)	(\$134.80)	(\$77.44)	\$171.05	\$66.52	\$53.94
Profitability Ranking	5	4	16	15	13	1	2	3
Return on Investment (ROI)	5.18%	7.27%	(24.33%)	(25.21%)	(14.02%)	21.96%	8.49%	6.78%
Return on Asset (ROA)	3.90%	3.99%	0.35%	0.47%	1.63%	7.06%	4.94%	4.69%

Breakeven Analysis

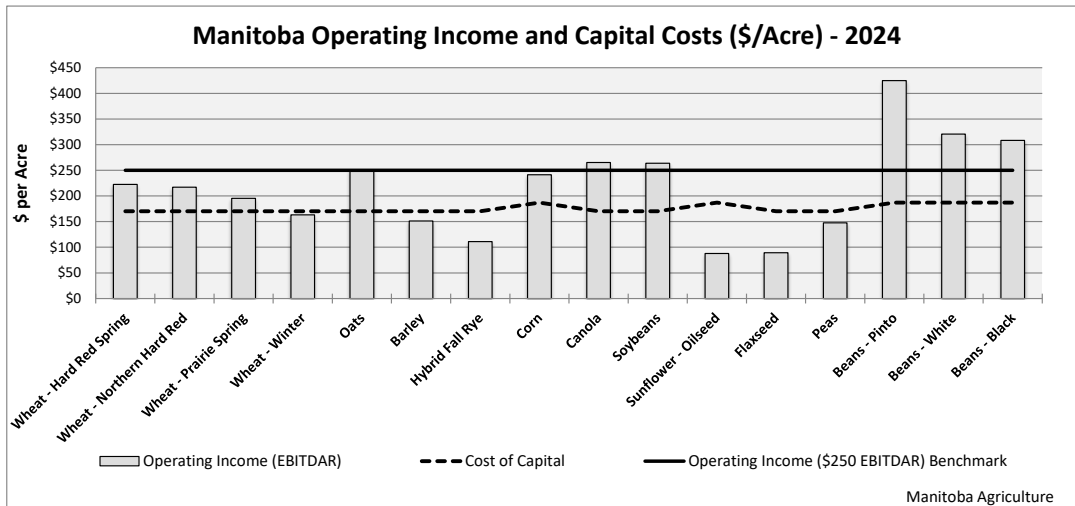
Breakeven Price Per Unit								
Over Operating Costs	\$10.14	\$8.49	\$0.21	\$12.69	\$6.70	\$0.28	\$0.32	\$0.33
Over Land Costs	\$2.25	\$2.67	\$0.05	\$4.06	\$2.03	\$0.05	\$0.06	\$0.06
Over Machinery Costs	\$1.98	\$2.35	\$0.05	\$3.57	\$1.78	\$0.06	\$0.06	\$0.06
Over Owners Labour & Living	\$0.60	\$0.71	\$0.01	\$1.08	\$0.54	\$0.01	\$0.02	\$0.02
Over Total Costs	\$14.97	\$14.22	\$0.33	\$21.39	\$11.05	\$0.41	\$0.46	\$0.47
Breakeven Yield (Bu or lb.)								
Over Operating Costs	29.0	21	1693	19.8	35.2	1083	1092	1117.2
Over Land Costs	6.4	6.7	405.7	6.3	10.7	202.9	202.9	202.9
Over Machinery Costs	5.7	5.8	436.1	5.6	9.4	218.1	218.1	218.1
Over Owners Labour & Living	1.7	1.8	108.0	1.7	2.8	54.0	54.0	54.0
Over Total Costs	42.8	35.3	2642.8	33.4	58.1	1558.0	1567.0	1592.2
Breakeven Yield Risk Ratio	105%	108%	76%	75%	86%	122%	108%	107%
(Target Yield per Acre / BE Yield)								

Note: This budget is only a guide and is not intended as an in depth study of the cost of production of this industry. Interpretation and utilization of this information is the responsibility of the user.

Crop Production Standardized Operating Statement 2024 (Dollars Per Acre)										
	Estimated Manitoba 2024 Benchmark		Wheat - Hard Red Spring	Wheat - Northern Hard Red	Wheat - Prairie Spring	Wheat - Winter	Oats	Barley	Hybrid Fall Rye	Corn
= Revenue	\$645	100%	\$601.25	\$612.50	\$577.50	\$520.00	\$575.00	\$487.50	\$520.00	\$843.75
- Cost of Goods Sold (CoGS)										
Seed & Treatment	\$65	10.1%	\$36.00	\$36.00	\$36.00	\$34.00	\$25.00	\$24.00	\$82.40	\$102.00
Fertilizer	\$120	18.6%	\$124.44	\$136.29	\$128.39	\$124.44	\$91.21	\$93.08	\$152.08	\$177.00
Crop Protection	\$55	8.5%	\$61.81	\$61.81	\$61.81	\$41.54	\$23.13	\$50.13	\$8.38	\$32.00
Crop Insurance	\$15	2.3%	\$13.52	\$16.41	\$12.45	\$13.98	\$21.02	\$18.96	\$18.50	\$50.70
Hail Insurance	\$12	1.9%	\$11.80	\$11.80	\$11.80	\$11.80	\$11.80	\$11.80	\$11.80	\$11.80
	\$267	41%	\$247.56	\$262.30	\$250.44	\$225.75	\$172.15	\$197.97	\$273.16	\$373.49
= Gross Margin (GM)	\$378	59%	\$353.69	\$350.20	\$327.06	\$294.25	\$402.85	\$289.53	\$246.84	\$470.26
- Direct Operating Expenses (DOE)										
Labour - Hired	\$5	0.8%	\$5.40	\$5.40	\$5.40	\$5.40	\$5.40	\$5.40	\$5.40	\$5.40
Owners - Labour & Living	\$25	3.9%	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00
Fuel	\$38	5.9%	\$38.14	\$38.83	\$38.28	\$38.14	\$44.98	\$41.74	\$38.79	\$46.59
Drying Costs	\$0	0.0%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$70.00
Storage Costs	\$15	2.3%	\$17.88	\$19.25	\$18.15	\$17.88	\$31.63	\$21.45	\$22.00	\$37.13
Machinery Operating	\$25	3.9%	\$25.00	\$25.00	\$25.00	\$25.00	\$25.00	\$25.00	\$25.00	\$25.00
Machinery Custom	\$0	0.0%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	\$108	17%	\$113.42	\$115.48	\$113.83	\$113.42	\$134.00	\$120.59	\$118.19	\$211.12
= Contribution Margin (CM)	\$270	42%	\$240.27	\$234.72	\$213.23	\$180.83	\$268.85	\$168.94	\$128.65	\$259.14
- Operating Overheads (OH)										
Other Costs	\$20	3.1%	\$17.75	\$17.75	\$17.75	\$17.75	\$17.75	\$17.75	\$17.75	\$17.75
= Earnings Before Interest Taxes Depreciation Amortization Rent (EBITDAR) or Operating Income										
EBITDAR	\$250	39%	\$222.52	\$216.97	\$195.48	\$163.08	\$251.10	\$151.19	\$110.90	\$241.39
- Cost of Capital (CoC) or Depreciation/Amortization/Lease/Rent										
Machinery Depreciation Costs	\$33	5.1%	\$32.50	\$32.50	\$32.50	\$32.50	\$32.50	\$32.50	\$32.50	\$39.75
Machinery Amortization Costs	\$37	5.7%	\$37.14	\$37.14	\$37.14	\$37.14	\$37.14	\$37.14	\$37.14	\$45.43
Machinery Opportunity Costs	\$5	0.8%	\$5.85	\$5.85	\$5.85	\$5.85	\$5.85	\$5.85	\$5.85	\$7.16
Land Amortization Costs	\$20	3.1%	\$19.92	\$19.92	\$19.92	\$19.92	\$19.92	\$19.92	\$19.92	\$19.92
Land Opportunity Costs	\$55	8.5%	\$54.78	\$54.78	\$54.78	\$54.78	\$54.78	\$54.78	\$54.78	\$54.78
Machinery Lease	\$0	0.0%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Land Taxes	\$20	3.1%	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00
	\$170	26%	\$170.19	\$170.19	\$170.19	\$170.19	\$170.19	\$170.19	\$170.19	\$187.03
= Earnings Before Interest Taxes (EBIT)	\$80	12%	\$52.32	\$46.78	\$25.29	(\$7.12)	\$80.90	(\$19.00)	(\$59.30)	\$54.36
- Interest Expenses										
Interest on Operating	\$18	2.8%	\$16.73	\$17.48	\$16.88	\$15.75	\$14.26	\$14.82	\$18.09	\$26.79
Land Interest Costs	\$27	4.2%	\$26.73	\$26.73	\$26.73	\$26.73	\$26.73	\$26.73	\$26.73	\$26.73
Machinery Interest Costs	\$15	2.3%	\$13.65	\$13.65	\$13.65	\$13.65	\$13.65	\$13.65	\$13.65	\$16.70
	\$60	9%	\$57.12	\$57.87	\$57.27	\$56.14	\$54.65	\$55.21	\$58.48	\$70.22
= Earnings Before Taxes (EBT)	\$20	3%	(\$4.79)	(\$11.09)	(\$31.98)	(\$63.25)	\$26.26	(\$74.21)	(\$117.77)	(\$15.86)



Crop Production Standardized Operating Statement 2024 (Dollars Per Acre)										
	Estimated Manitoba Benchmark		Canola	Soybeans	Sunflower - Oilseed	Flaxseed	Peas	Beans - Pinto	Beans - White	Beans - Black
= Revenue	\$645	100%	\$708.75	\$579.50	\$500.00	\$400.00	\$475.00	\$950.00	\$850.00	\$850.00
- Cost of Goods Sold (CoGS)										
Seed & Treatment	\$65	10.1%	\$80.00	\$90.00	\$50.00	\$64.00	\$88.00	\$116.00	\$112.00	\$118.00
Fertilizer	\$120	18.6%	\$142.10	\$42.23	\$116.14	\$62.46	\$28.13	\$78.26	\$86.16	\$86.16
Crop Protection	\$55	8.5%	\$66.76	\$23.58	\$47.52	\$32.26	\$46.00	\$129.78	\$129.78	\$129.78
Crop Insurance	\$15	2.3%	\$17.50	\$25.95	\$27.35	\$21.70	\$19.66	\$39.01	\$40.82	\$46.86
Hail Insurance	\$12	1.9%	\$11.80	\$15.34	\$11.80	\$11.80	\$23.60	\$20.65	\$20.65	\$20.65
	\$267	41%	\$318.15	\$197.10	\$252.80	\$192.22	\$205.39	\$383.70	\$389.41	\$401.45
= Gross Margin (GM)	\$378	59%	\$390.60	\$382.40	\$247.20	\$207.78	\$269.61	\$566.30	\$460.59	\$448.55
- Direct Operating Expenses (DOE)										
Labour - Hired	\$5	0.8%	\$5.40	\$5.40	\$5.40	\$5.40	\$5.40	\$5.40	\$5.40	\$5.40
Owners - Labour & Living	\$25	3.9%	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00
Fuel	\$38	5.9%	\$37.93	\$33.05	\$39.07	\$36.32	\$33.15	\$32.61	\$32.15	\$32.15
Drying Costs	\$0	0.0%	\$0.00	\$0.00	\$10.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Storage Costs	\$15	2.3%	\$12.38	\$10.45	\$22.00	\$6.88	\$13.75	\$8.71	\$7.79	\$7.79
Machinery Operating	\$25	3.9%	\$25.00	\$25.00	\$25.00	\$25.00	\$25.00	\$25.00	\$25.00	\$25.00
Machinery Custom	\$0	0.0%	\$0.00	\$0.00	\$13.00	\$0.00	\$0.00	\$25.00	\$25.00	\$25.00
	\$108	17%	\$107.71	\$100.90	\$141.47	\$100.59	\$104.30	\$123.72	\$122.34	\$122.34
= Contribution Margin (CM)	\$270	42%	\$282.89	\$281.50	\$105.72	\$107.19	\$165.31	\$442.58	\$338.25	\$326.21
- Operating Overheads (OH)										
Other Costs	\$20	3.1%	\$17.75	\$17.75	\$17.75	\$17.75	\$17.75	\$17.75	\$17.75	\$17.75
= Earnings Before Interest Taxes Depreciation Amortization Rent (EBITDAR) or Operating Income	\$250	39%	\$265.14	\$263.75	\$87.97	\$89.44	\$147.56	\$424.83	\$320.50	\$308.46
- Cost of Capital (CoC) or Depreciation/Amortization/Lease/Rent										
Machinery Depreciation Costs	\$33	5.1%	\$32.50	\$32.50	\$39.75	\$32.50	\$32.50	\$39.75	\$39.75	\$39.75
Machinery Amortization Costs	\$37	5.7%	\$37.14	\$37.14	\$45.43	\$37.14	\$37.14	\$45.43	\$45.43	\$45.43
Machinery Opportunity Costs	\$5	0.8%	\$5.85	\$5.85	\$7.16	\$5.85	\$5.85	\$7.16	\$7.16	\$7.16
Land Amortization Costs	\$20	3.1%	\$19.92	\$19.92	\$19.92	\$19.92	\$19.92	\$19.92	\$19.92	\$19.92
Land Opportunity Costs	\$55	8.5%	\$54.78	\$54.78	\$54.78	\$54.78	\$54.78	\$54.78	\$54.78	\$54.78
Machinery Lease	\$0	0.0%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Land Taxes	\$20	3.1%	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00
	\$170	26%	\$170.19	\$170.19	\$187.03	\$170.19	\$170.19	\$187.03	\$187.03	\$187.03
= Earnings Before Interest Taxes (EBIT)	\$80	12%	\$94.95	\$93.55	(\$99.06)	(\$80.75)	(\$22.64)	\$237.80	\$133.47	\$121.43
- Interest Expenses										
Interest on Operating	\$18	2.8%	\$19.65	\$13.89	\$18.23	\$13.66	\$14.42	\$23.32	\$23.51	\$24.05
Land Interest Costs	\$27	4.2%	\$26.73	\$26.73	\$26.73	\$26.73	\$26.73	\$26.73	\$26.73	\$26.73
Machinery Interest Costs	\$15	2.3%	\$13.65	\$13.65	\$16.70	\$13.65	\$13.65	\$16.70	\$16.70	\$16.70
	\$60	9%	\$60.04	\$54.28	\$61.66	\$54.05	\$54.81	\$66.75	\$66.94	\$67.48
= Earnings Before Taxes (EBT)	\$20	3%	\$34.92	\$39.28	(\$160.72)	(\$134.80)	(\$77.44)	\$171.05	\$66.52	\$53.94



AgrilInsurance Analysis

Based on 2023 MASC data

	Wheat - Hard Red Spring	Wheat - Northern Hard Red	Wheat - Prairie Spring	Wheat - Winter	Oats	Barley	Hybrid Fall Rye	Corn
AgrilInsurance								
80% Insured Value	\$586	\$555	\$506	\$528	\$468	\$418	\$404	\$827
Premium Cost (% of Insured)	2.3%	3.0%	2.5%	2.6%	4.5%	4.5%	4.6%	6.1%
Costs Not Covered By AgrilInsurance								
Operating Costs	\$0	\$0	\$0	\$0	\$0	\$0	\$16	\$0
Operating & Fixed Costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Costs	\$20	\$69	\$104	\$56	\$81	\$144	\$234	\$32
AgrilInsurance Risk Ratio	(AgrilInsurance Coverage / Cost)							
Operating Costs	151%	137%	129%	144%	141%	121%	96%	133%
Total Costs	97%	89%	83%	90%	85%	74%	63%	96%
Risk Ranking	15	10	7	13	11	4	1	8
(Lower number indicates increasing risk)								

Risk & Sensitivity Analysis (Stress Test)

Percent Crop Yield Change	(20%)	Percent Fertilizer Cost Change	0%
Percent Market Price Change	(10%)	Percent Seed Cost Change	0%
Percent Fuel Cost Change	0%	Percent Pesticide Cost Change	0%

	Wheat - Hard Red Spring	Wheat - Northern Hard Red	Wheat - Prairie Spring	Wheat - Winter	Oats	Barley	Hybrid Fall Rye	Corn
Percent Crop Yield Change	(20%)	(20%)	(20%)	(20%)	(20%)	(20%)	(20%)	(20%)
Yield (units/acre)	52.0	56.0	52.8	52.0	92.0	62.4	64.0	108.0
Percent Market Price Change	(10%)	(10%)	(10%)	(10%)	(10%)	(10%)	(10%)	(10%)
Price (\$/unit)	\$8.33	\$7.88	\$7.88	\$7.20	\$4.50	\$5.63	\$5.85	\$5.63
Change in Profit (Loss) \$/acre	(\$168)	(\$172)	(\$162)	(\$146)	(\$161)	(\$137)	(\$146)	(\$236)
Adjusted Net Profit (Loss) \$/acre	(\$173)	(\$183)	(\$194)	(\$209)	(\$135)	(\$211)	(\$263)	(\$252)
Adjusted Profitability Ranking	6	7	9	10	3	12	15	14

Stress Test - Total Farm Debt (\$/acre) = \$816 (land debt of \$498/acre + machinery debt of \$318/acre, farm equity = 83.5%)
 (compared to baseline - Total Farm Debt (\$/acre) = \$816 land debt of \$498/acre + machinery debt of \$318/acre, farm equity = 83.5%)

Rotation Economic Analysis

Data Source – MASC Harvest Production Reports (2010-2015)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
Example Rotation #1	Wheat - Hard Red Spring	Canola	Wheat - Hard Red Spring	Canola	Wheat - Hard Red Spring	Canola	Rotation Total Marginal Return
Rotation Yield Premium	100%	102%	101%	102%	101%	102%	-
Net Profit (Loss)	(\$4.79)	\$49.09	\$1.22	\$49.09	\$1.22	\$49.09	\$145

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
Example Rotation #2	Corn	Canola	Wheat - Hard Red Spring	Soybeans	Corn	Canola	Rotation Total Marginal Return
Rotation Yield Premium	100%	112%	101%	101%	103%	112%	-
Net Profit (Loss)	(\$15.86)	\$119.97	\$1.22	\$45.07	\$9.45	\$119.97	\$280

Note: This budget is only a guide and is not intended as an in depth study of the cost of production of this industry. Interpretation and utilization of this information is the responsibility of the user.

AgrilInsurance Analysis

	Canola	Soybeans	Sunflower - Oilseed	Flaxseed	Peas	Beans - Pinto	Beans - White	Beans - Black
AgrilInsurance								
80% Insured Value	\$720	\$482	\$599	\$359	\$450	\$694	\$688	\$638
Premium Cost (% of Insured)	2.4%	5.4%	4.6%	6.0%	4.4%	5.6%	5.9%	7.3%
Costs Not Covered By AgrilInsurance								
Operating Costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operating & Fixed Costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Costs	\$0	\$58	\$62	\$176	\$102	\$85	\$96	\$158
AgrilInsurance Risk Ratio								
Operating Costs	158%	149%	142%	113%	134%	128%	126%	114%
Total Costs	107%	89%	91%	67%	81%	89%	88%	80%
Risk Ranking	16	14	12	2	9	6	5	3
<small>(Lower number indicates increasing risk)</small>								

Risk & Sensitivity Analysis (Stress Test)

Change in Equipment Investment (\$/Acre)	\$0	= \$0.00 increased equipment cost /acre
Change in Owned Acres (Purchase or Sale @ \$4,150/acre)	0	= \$0.00 increased land cost /acre

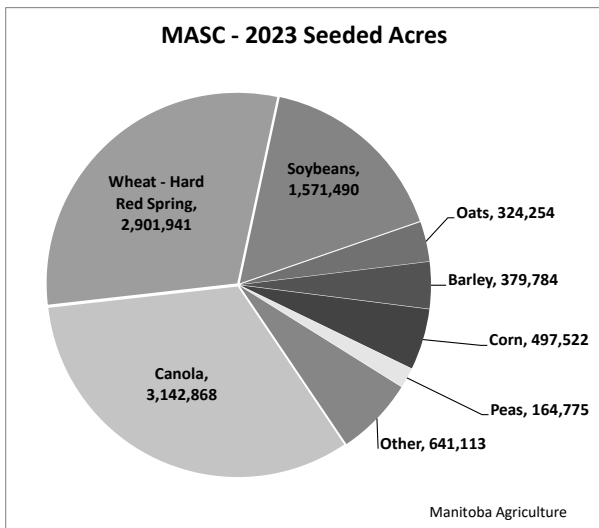
	Canola	Soybeans	Sunflower - Oilseed	Flaxseed	Peas	Beans - Pinto	Beans - White	Beans - Black
Percent Crop Yield Change	(20%)	(20%)	(20%)	(20%)	(20%)	(20%)	(20%)	(20%)
Yield (units/acre)	36.0	30.4	1600.0	20.0	40.0	1520.0	1360.0	1360.0
Percent Market Price Change	(10%)	(10%)	(10%)	(10%)	(10%)	(10%)	(10%)	(10%)
Price (\$/unit)	\$14.18	\$13.73	\$0.23	\$14.40	\$8.55	\$0.45	\$0.45	\$0.45
Change in Profit (Loss) \$/acre	(\$198)	(\$162)	(\$140)	(\$112)	(\$133)	(\$266)	(\$238)	(\$238)
Adjusted Net Profit (Loss) \$/acre	(\$164)	(\$123)	(\$301)	(\$247)	(\$210)	(\$95)	(\$171)	(\$184)
Adjusted Profitability Ranking	4	2	16	13	11	1	5	8

Rotation Economic Analysis

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
Example Rotation #3	Wheat - Hard Red Spring	Canola	Oats	Soybeans	Corn	Sunflower	Rotation Total Marginal Return
Rotation Yield Premium	100%	102%	101%	100%	103%	119%	-
Net Profit (Loss)	(\$4.79)	\$49.09	\$32.01	\$39.28	\$9.45	#N/A	#N/A

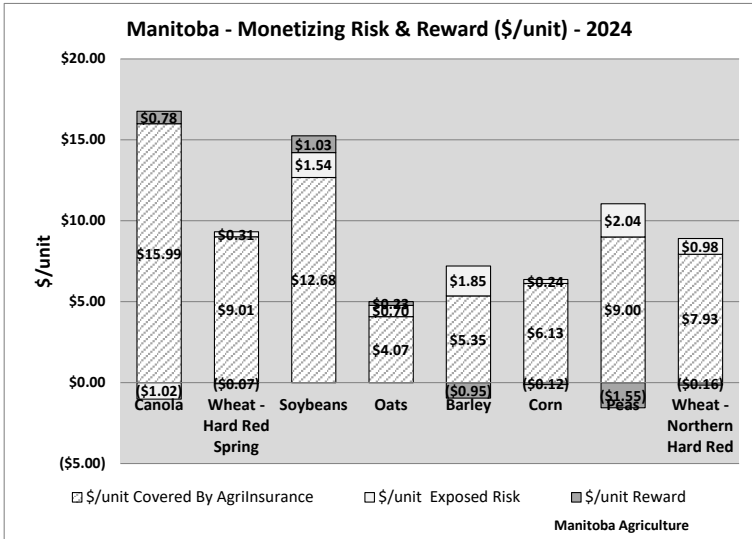
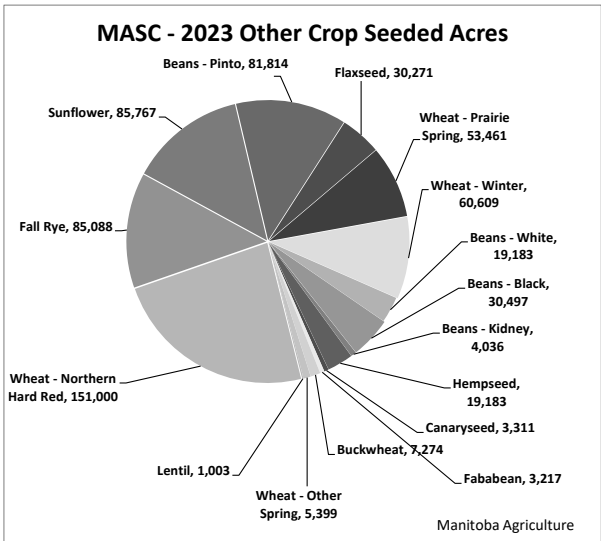
		Wheat - Hard Red Spring			Wheat - Hard Red Spring			
Your Farm Rotation	Soybeans	Canola	Soybeans	Canola	Soybeans	Canola	Rotation Total Marginal Return	
Rotation Yield Premium	100%	108%	102%	100%	108%	102%	-	
Net Profit (Loss)	\$39.28	\$43.31	\$49.09	\$39.28	\$43.31	\$49.09	\$263	

Note: This budget is only a guide and is not intended as an in depth study of the cost of production of this industry. Interpretation and utilization of this information is the responsibility of the user.

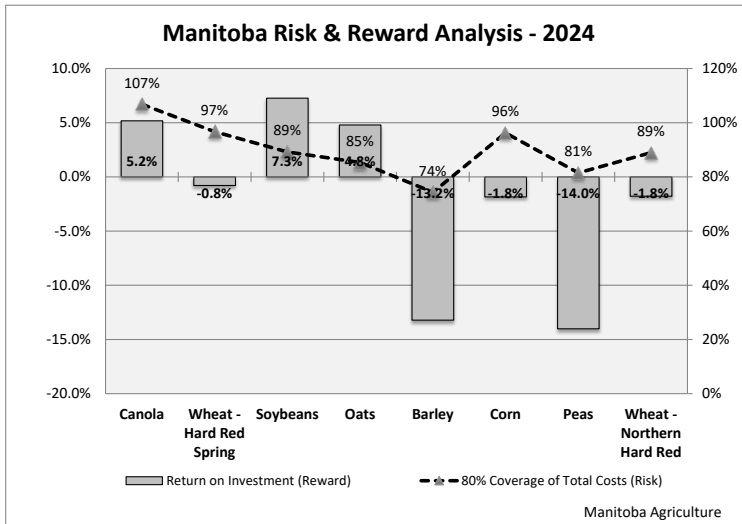


Canola, Wheat - Hard Red Spring and Soybeans total 79% of the 2023 Seeded Acres and 77% of the 5 Year Average Seeded Acres

Other Crops are 7% of the 2023 Seeded Acres

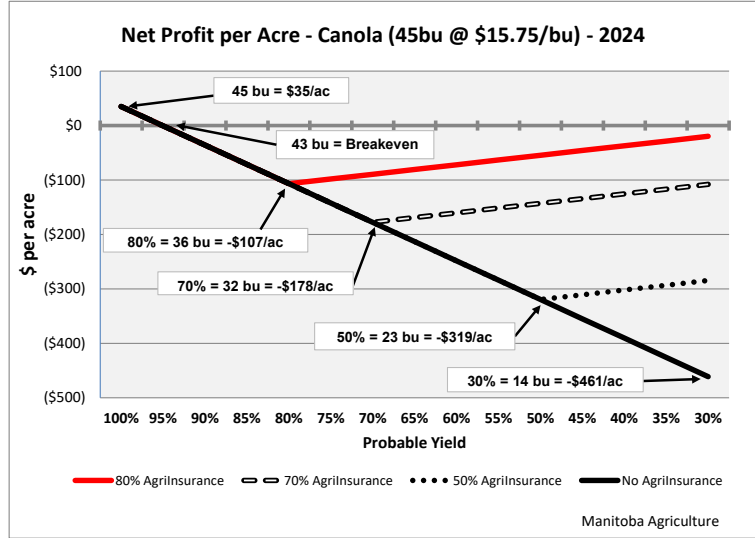
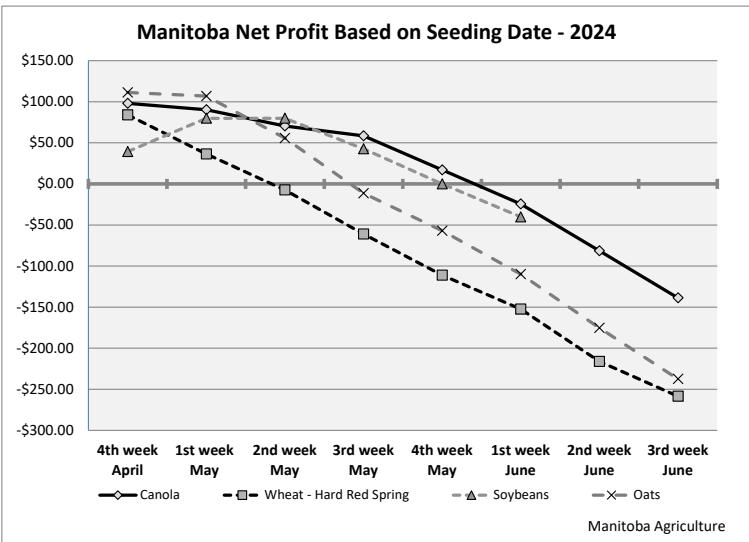


Covered Risk = 80% AgrInsurance \$ per Acre / yield per acre.
 Exposed Risk = Breakeven Price per Unit - Covered Risk.
 Reward = Market Price per Unit - Breakeven Price per Unit.

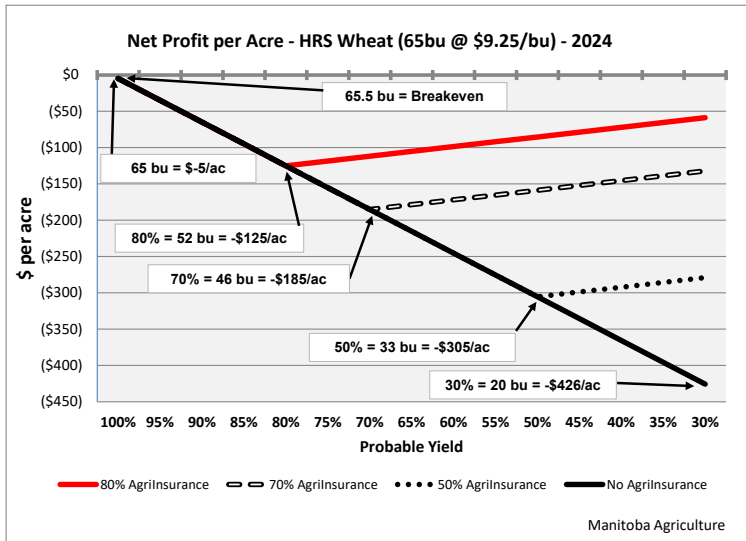


Analysis of ROI (Reward) and the associated Agrilnsurance Coverage of Total Costs (Risk) is useful in comparing the profitability and cost efficiency alongside the production cost risk when evaluating crops to include in your rotation and is an important step in Risk Management Planning for your farm.

Seeding Date can have a significant impact on crop yields and net profitability. Analysis of seeding dates will highlight potential windows of profitability to seed crops in your rotation and is an important step in Risk Management Planning.

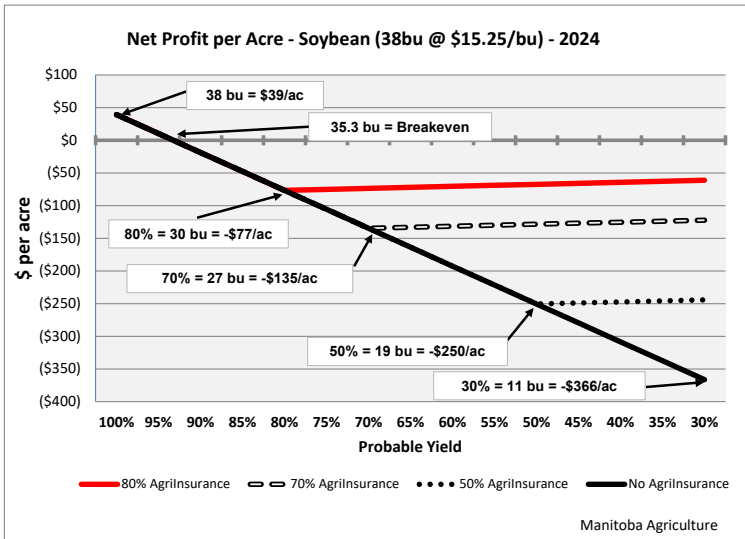


80% Agrilnsurance (AI) has \$88/ac more coverage compared to 70% AI for a 32 bu yield, \$265/ac more coverage compared to 50% AI for a 23 bu yield, and \$441/ac more coverage compared to no AI for a 14 bu yield.

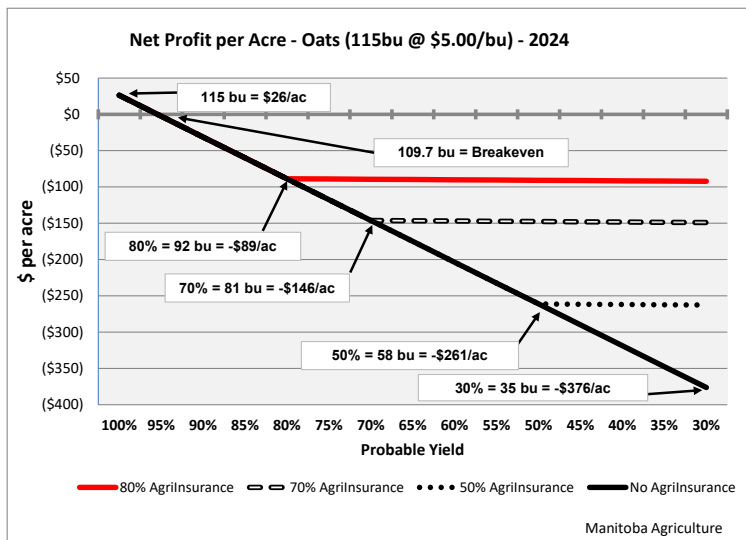


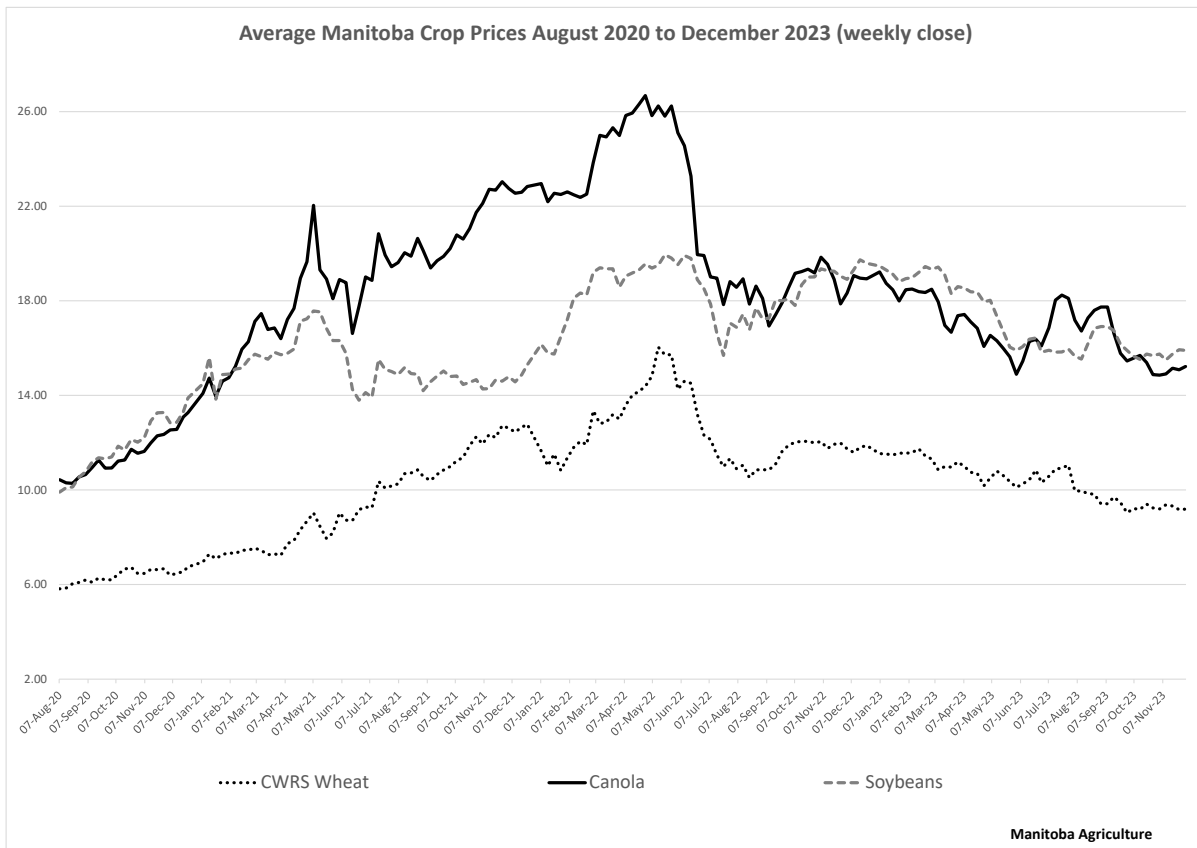
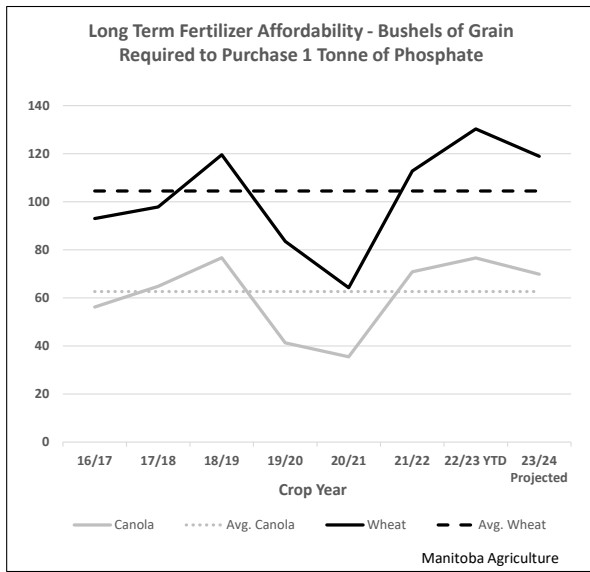
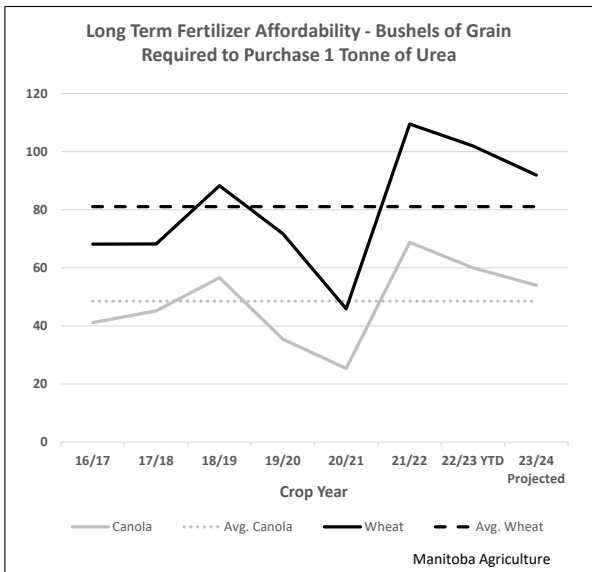
80% AgrilInsurance (AI) has \$73/ac more coverage compared to 70% AI for a 46 bu yield, \$220/ac more coverage compared to 50% AI for a 33 bu yield, and \$367/ac more coverage compared to no AI for a 20 bu yield.

80% AgrilInsurance (AI) has \$61/ac more coverage compared to 70% AI for a 27 bu yield, \$183/ac more coverage compared to 50% AI for a 19 bu yield, and \$305/ac more coverage compared to no AI for a 11 bu yield.



80% AgrilInsurance (AI) has \$57/ac more coverage compared to 70% AI for a 81 bu yield, \$170/ac more coverage compared to 50% AI for a 58 bu yield, and \$284/ac more coverage compared to no AI for a 35 bu yield.





Seed & Treatment

<u>Crop</u>	<u>Seeding Rate</u> <u>per Acre</u>	<u>Price</u> <u>per Unit</u>	<u>Cost</u> <u>per Acre</u>
Wheat - Hard Red Spring	2.0 bu	\$18.00 /bu	\$36.00
Wheat - Northern Hard Red	2.0 bu	\$18.00 /bu	\$36.00
Wheat - Prairie Spring	2.0 bu	\$18.00 /bu	\$36.00
Wheat - Winter	2.0 bu	\$17.00 /bu	\$34.00
Oats	2.5 bu	\$10.00 /bu	\$25.00
Barley	2.0 bu	\$12.00 /bu	\$24.00
Hybrid Fall Rye	0.80 units	\$103.00 /unit	\$82.40
Corn	32,000 plants	\$0.0032 /plant	\$102.00
Canola	5 lb	\$16.00 /lb	\$80.00
Soybeans	1.43 units	\$62.94 /unit	\$90.00
Sunflower - Oilseed	20,000 plants	\$0.0025 /plant	\$50.00
Flaxseed	56 lb	\$1.14 /lb	\$64.00
Peas	3 bu	\$29.33 /bu	\$88.00
Beans - Pinto	0.75 units	\$154.67 /unit	\$116.00
Beans - White	1.10 units	\$101.82 /unit	\$112.00
Beans - Black	1.25 units	\$94.40 /unit	\$118.00

* If row cropping, change seeding rate to 1.3 units/acre which reduces seed cost by 10%

Fertilizer

<u>Fertilizer Type</u>	<u>Bulk Price</u> <u>\$/tonne</u>	<u>Actual Nutrient</u> <u>\$/lb</u>	<u>Nitrogen</u> <u>Usage</u>	<u>Sulphur</u> <u>Usage</u>
Nitrogen: (urea) 46-0-0	\$825	\$0.814	75%	-
Nitrogen: (NH3) 82-0-0	\$1,300	\$0.719	25%	-
Nitrogen: (liquid) 28-0-0	\$500	\$0.810	0%	-
Phosphorus: 11-52-0	\$1,075	\$0.766	-	-
Potash: 0-0-60	\$625	\$0.473	-	-
Sulphur: 20.5-0-0-24	\$600	\$0.439	-	100%
MES S15: 13-33-0-15	\$1,000	\$0.635	-	0%

Amount of Actual Pounds of Elements Applied Per Acre

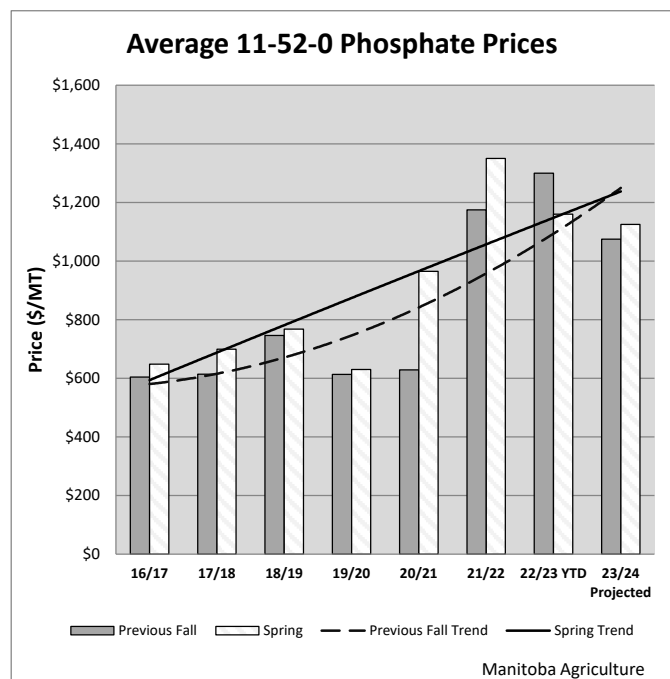
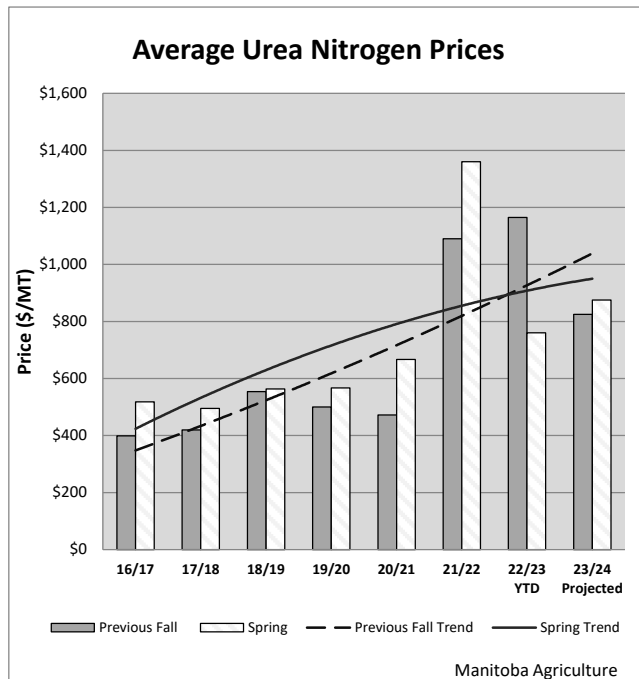
<u>Crop</u>	<u>Nitrogen</u>		<u>Phosphorus</u>		<u>Potash</u>		<u>Sulphur</u>		<u>Total</u> <u>\$/acre</u>
	<u>lbs</u>	<u>\$/acre</u>	<u>lbs</u>	<u>\$/acre</u>	<u>lbs</u>	<u>\$/acre</u>	<u>lbs</u>	<u>\$/acre</u>	
Wheat - Hard Red Spring	110	\$76.53	40	\$37.51	10	\$4.72	5	\$5.67	\$124.44
Wheat - Northern Hard Red	125	\$88.38	40	\$37.51	10	\$4.72	5	\$5.67	\$136.29
Wheat - Prairie Spring	115	\$80.48	40	\$37.51	10	\$4.72	5	\$5.67	\$128.39
Wheat - Winter	110	\$76.53	40	\$37.51	10	\$4.72	5	\$5.67	\$124.44
Oats	70	\$42.32	35	\$32.82	10	\$4.72	10	\$11.34	\$91.21
Barley	80	\$54.56	30	\$28.13	10	\$4.72	5	\$5.67	\$93.08
Hybrid Fall Rye	145	\$104.18	40	\$37.51	10	\$4.72	5	\$5.67	\$152.08
Corn	135	\$81.56	65	\$60.95	25	\$11.81	20	\$22.68	\$177.00
Canola	130	\$81.91	40	\$37.51	0	\$0.00	20	\$22.68	\$142.10
Soybeans	0	\$0.00	40	\$37.51	10	\$4.72	0	\$0.00	\$42.23
Sunflower - Oilseed	100	\$73.83	30	\$28.13	30	\$14.17	0	\$0.00	\$116.14
Flaxseed	50	\$34.33	30	\$28.13	0	\$0.00	0	\$0.00	\$62.46
Peas	0	\$0.00	30	\$28.13	0	\$0.00	0	\$0.00	\$28.13
Beans - Pinto	70	\$50.13	30	\$28.13	0	\$0.00	0	\$0.00	\$78.26
Beans - White	80	\$58.03	30	\$28.13	0	\$0.00	0	\$0.00	\$86.16
Beans - Black	80	\$58.03	30	\$28.13	0	\$0.00	0	\$0.00	\$86.16

* The fertilizer recommendation will vary depending on the soil type, climate and crop rotation. It is recommended that soil test sampling and analysis be conducted each year to produce a better baseline for fertility. It costs \$1.00 to \$2.00/acre for custom sampling and analysis.

* For more information on fertilizer rates and recommendations - [Fertilizer Cost & Efficiency](#)

* Note: phosphorus amounts are allotted to each crop in the above examples. Sometimes this amount may not be practical or safe to apply with the seed of some crops like soybean or canola. Options for meeting these needs and phosphorus balance through the rotation are provided at:

[Phosphorus Balance Calculator](#)



Crop Protection

Crop	Weed Control	Disease Control	Insect Control	Total Cost
	\$/acre	\$/acre	\$/acre	\$/acre
Wheat - Hard Red Spring	\$37.31	\$24.50	\$0.00	\$61.81
Wheat - Northern Hard Red	\$37.31	\$24.50	\$0.00	\$61.81
Wheat - Prairie Spring	\$37.31	\$24.50	\$0.00	\$61.81
Wheat - Winter	\$17.04	\$24.50	\$0.00	\$41.54
Oats	\$8.50	\$14.63	\$0.00	\$23.13
Barley	\$28.25	\$21.88	\$0.00	\$50.13
Hybrid Fall Rye	\$8.38	\$0.00	\$0.00	\$8.38
Corn	\$32.00	\$0.00	\$0.00	\$32.00
Canola	\$38.29	\$23.13	\$5.34	\$66.76
Soybeans	\$23.58	\$0.00	\$0.00	\$23.58
Sunflower - Oilseed	\$47.52	\$0.00	\$0.00	\$47.52
Flaxseed	\$15.63	\$16.63	\$0.00	\$32.26
Peas	\$21.00	\$25.00	\$0.00	\$46.00
Beans - Pinto	\$84.90	\$44.88	\$0.00	\$129.78
Beans - White	\$84.90	\$44.88	\$0.00	\$129.78
Beans - Black	\$84.90	\$44.88	\$0.00	\$129.78

Note:
 Pre-emergent burn off and/or pre-harvest desiccation not included in weed control costs. (except for wheat, win. wheat and sunflowers).
 Chemical costs do not include year end rebates or bundling discounts.
 Disease Control costs (except for sunflowers listed on Operating Cost Page) do not include custom application costs.

Operating Costs

Interest Rate on Operating	9.00%
Land Taxes (\$/acre)	\$20.00
Labour rate (\$/hour)	\$27.00
Machinery Operating (\$/acre)	\$25.00
Other Costs (\$/acre)	\$17.75
Fuel Cost (\$/litre)	\$1.40
Owners - Labour & Living (hrs/acre)	1.0

<u>Grain Hauling</u>	
Distance to storage	6 miles roundtrip
Distance to market	45 miles roundtrip
Grain truck fuel use	5 Miles per Imp. Gallon
Grain truck size	475 bushels

Operating Cost (\$/Acre)

Crop	Hired Labour (hrs/acre)	Fuel	Crop*		Hail Insurance	Drying Costs	Storage \$/acre**	Rental and Custom Costs					Total
			Insurance	Insurance				Seeding	Application	Swathing	Harvest	General	
Wheat - Hard Red Spring	0.2	\$38.14	\$13.52	\$11.80	-	\$17.88	-	-	-	-	-	-	\$0.00
Wheat - Northern Hard Red	0.2	\$38.83	\$16.41	\$11.80	-	\$19.25	-	-	-	-	-	-	\$0.00
Wheat - Prairie Spring	0.2	\$38.28	\$12.45	\$11.80	-	\$18.15	-	-	-	-	-	-	\$0.00
Wheat - Winter	0.2	\$38.14	\$13.98	\$11.80	-	\$17.88	-	-	-	-	-	-	\$0.00
Oats	0.2	\$44.98	\$21.02	\$11.80	-	\$31.63	-	-	-	-	-	-	\$0.00
Barley	0.2	\$41.74	\$18.96	\$11.80	-	\$21.45	-	-	-	-	-	-	\$0.00
Hybrid Fall Rye	0.2	\$38.79	\$18.50	\$11.80	-	\$22.00	-	-	-	-	-	-	\$0.00
Corn	0.2	\$46.59	\$50.70	\$11.80	\$70.00	\$37.13	-	-	-	-	-	-	\$0.00
Canola	0.2	\$37.93	\$17.50	\$11.80	-	\$12.38	-	-	-	-	-	-	\$0.00
Soybeans	0.2	\$33.05	\$25.95	\$15.34	-	\$10.45	-	-	-	-	-	-	\$0.00
Sunflower - Oilseed	0.2	\$39.07	\$27.35	\$11.80	\$10.00	\$22.00	-	\$13.00	-	-	-	-	\$13.00
Flaxseed	0.2	\$36.32	\$21.70	\$11.80	-	\$6.88	-	-	-	-	-	-	\$0.00
Peas	0.2	\$33.15	\$19.66	\$23.60	-	\$13.75	-	-	-	-	-	-	\$0.00
Beans - Pinto	0.2	\$32.61	\$39.01	\$20.65	-	\$8.71	-	-	-	-	-	\$25.00	\$25.00
Beans - White	0.2	\$32.15	\$40.82	\$20.65	-	\$7.79	-	-	-	-	-	\$25.00	\$25.00
Beans - Black	0.2	\$32.15	\$46.86	\$20.65	-	\$7.79	-	-	-	-	-	\$25.00	\$25.00

* 80% Insured Value - Based on MASC Risk Areas 2, 5, 6, & 12

** Storage costs are listed under Fixed Costs on the Summary Page.

Field Fuel Usage

Crop	Total L/acre	Number of Field Operations & Litres Fuel Per Acre Per Operation								Trucks L/acre	
		cultivator or tandem disk	high speed disk	harrow or land roller	air drill	row planter	SP sprayer	swather	combine & grain cart	3/4 ton pickup	grain hauling
Wheat - Hard Red Spring	27.25	2	3.5	1	1		4	1.8	1	2	6.35
Wheat - Northern Hard Red	27.73	2		1	1		4		1	2	6.83
Wheat - Prairie Spring	27.34	2		1	1		4		1	2	6.44
Wheat - Winter	27.25	2		1	1		4		1	2	6.35
Oats	32.13	2		1	1	1	4		1	2	11.23
Barley	29.81	2		1	1		3	1	1	2	7.61
Hybrid Fall Rye	27.71	2		1	1		2		1	2	7.81
Corn	33.28	1	1	1		1	3		1	2	13.18
Canola	27.09	2		1	1		4	1	1	2	4.39
Soybeans	23.61	2		1	1		2		1	2	3.71
Sunflower - Oilseed	27.91	1	1	1		1	3		1	2	7.81
Flaxseed	25.94	2		2	1		3	1	1	2	2.44
Peas	23.68	1		2	1		3		1	2	4.88
Beans - Pinto	23.29	1		2		1	4	1	1	2	3.09
Beans - White	22.97	1		2		1	4	1	1	2	2.77
Beans - Black	22.97	1		2		1	4	1	1	2	2.77

Guidelines: Crop Production Costs

Fixed Costs				
Land				
Average Land value (\$/acre)		\$4,150		
Conventional Crop acres		2,000		
Special Crop acres		500		
Owned Land Equity		88%		
Land Financed (\$498 per acre)		12%		
Land Opportunity Cost (Investment Rate)		1.50%		
Land cost (\$/acre)				
Finance Rate & Term	8.000%		25 Years	
Principle & Interest Cost		\$46.65		
Owned Land Opportunity Cost		\$54.78		
Total Cost		\$101.43		
Grain Storage		<u>Usage %</u>	<u>Cost</u>	
Non-aeration bins		15%	\$3.50 /bu	
Aeration bins		70%	\$4.50 /bu	
Hopper bins		15%	\$5.50 /bu	
Storage Financed			60%	
Machinery				
Total Investment (\$/acre)				Conventional Crop \$650.00
Residual Value (End of Useful Life)				Special Crop \$145.00
Useful Life (years)				25%
Owned Equipment Equity				15
Equipment Financed (\$318 per acre)				60%
Machinery Opportunity Cost (Investment Rate)				40%
				1.50%
Machinery Cost (\$/acre)				
Finance Rate & Term	8.500%		7 Years	
Principle & Interest Cost		\$50.80		\$11.33
Machinery Depreciation Cost		\$32.50		\$7.25
Owned Machinery Opportunity Cost		\$5.85		\$1.31
		\$89.15		\$19.89
Total Land & Machinery Debt (\$/acre)				\$816
Total Debt / EDIBTAR benchmark ratio = 3.26:1				

Conventional Crop Equipment Inventory and Current Values								
	<u>Market Value</u>	<u>Grain Usage %</u>	<u>Grain Allocation</u>		<u>Market Value</u>	<u>Grain Usage %</u>	<u>Grain Allocation</u>	
Power Equipment				Harvest Equipment				
4WD Tractor 475HP	\$325,000	100%	\$325,000	Combine	\$325,000	100%	\$325,000	
MFWD Tractor 150HP	\$120,000	100%	\$120,000	Swather 35 ft	\$51,000	100%	\$51,000	
2WD Tractor 60HP	\$36,000	100%	\$36,000	Harvest Header	\$60,000	100%	\$60,000	
ATV Quad	\$6,000	100%	\$6,000	Tandem grain truck	\$72,000	100%	\$72,000	
	\$0	0%	\$0	Grain cart	\$40,000	100%	\$40,000	
	\$0	0%	\$0		\$0	0%	\$0	
	\$0	0%	\$0		\$0	0%	\$0	
Total Inv. = \$487,000 (\$195/acre or 30% of Total)				Total Inv. = \$548,000 (\$219/acre or 34% of Total)				

	<u>Market Value</u>	<u>Grain Usage %</u>	<u>Grain Allocation</u>		<u>Market Value</u>	<u>Grain Usage %</u>	<u>Grain Allocation</u>	
Seeding & Tillage				Spraying & Misc.				
Cultivator	\$18,000	100%	\$18,000	SP sprayer	\$235,000	100%	\$235,000	
Harrow 80ft	\$32,000	100%	\$32,000	Miscellaneous	\$20,000	100%	\$20,000	
Air tank	\$70,000	100%	\$70,000	PTO Auger 13x70	\$15,000	100%	\$15,000	
Air drill	\$175,000	100%	\$175,000	Auger 8x35	\$5,000	100%	\$5,000	
	\$0	0%	\$0	Farm pickup truck	\$40,000	50%	\$20,000	
	\$0	0%	\$0		\$0	0%	\$0	
Total Inv. = \$295,000 (\$118/acre or 18% of Total)				Total Inv. = \$295,000 (\$118/acre or 18% of Total)				

Owned Equipment TOTAL \$1,625,000

Special Crop Equipment Inventory and Current Values								
	<u>Market Value</u>	<u>Grain Usage %</u>	<u>Grain Allocation</u>		<u>Market Value</u>	<u>Grain Usage %</u>	<u>Grain Allocation</u>	
Seeding, Tillage, Spraying				Harvest Equipment				
Planter	\$140,000	100%	\$140,000	Harvest Header	\$72,500	100%	\$72,500	
High speed disc	\$150,000	100%	\$150,000		\$0	0%	\$0	
Total			\$290,000	Total			\$72,500	
Special Equipment TOTAL		\$362,500						

Leased Equipment Inventory								
	<u>Annual Lease</u>	<u>Grain Usage %</u>	<u>Grain Allocation</u>		<u>Annual Lease</u>	<u>Grain Usage %</u>	<u>Grain Allocation</u>	
Seeding, Tillage, Spraying				Trucks & Trailers				
enter equipment here	\$0	0%	\$0	enter equipment here	\$0	0%	\$0	
	\$0	0%	\$0		\$0	0%	\$0	
	\$0	0%	\$0		\$0	0%	\$0	
Total			\$0	Total			\$0	
Leased Equipment TOTAL		\$0	\$0.00 per acre					

* Leased equipment costs are listed under Operating Costs on the Summary Page.

Other Assumptions

Fuel Costs: Includes fuel used for field work, trucking in inputs and trucking out production.

Machinery Operating Costs: Includes costs for maintenance, repairs, licenses and insurance, based on 4.2% of machinery investment cost.

Crop Insurance: (2023 rates)

80% Insured Value coverage, \$100/acre excess moisture Insurance, and additional hail insurance at \$400/acre coverage for all crops. Coverage and costs based on MASC Risk Areas #2, 5, 6, and 12.

Other Costs: Includes overhead expenses - hydro, telephone, accounting, buildings, supplies and insurance, etc.

Land Taxes: The average cost based on land tax assessment and mill rates of a sample of municipalities growing crops less provincial tax rebate.

Drying Costs: Budget allocates costs only for corn and sunflowers. However, drying costs may be incurred in some years for the other crops.

Interest On Operating: Interest charges on operating costs are calculated at 9% for six months.

Land Cost:

Based on approximate average land values. Budget assumed 12% financed at 8% for 25 years, plus 1.5% land equity opportunity cost. Budget can be used to estimate cashflow by removing investment cost.

P&I Cost (based on \$1,245,000 Mortgage) = \$116,630 payments per year / 2500 acres = \$46.65/acre)

Investment = (Total Investment x Owned Equity %) x Investment Rate % (eg. ((\$4,150 x 88%) x 1.5%) = \$54.78/acre)

Machinery Cost:

Based on approximate average machinery values. Budget assumed 40% financed at 8.5% for 7 years, depreciation costs over 15 years with a 25% residual value, plus 1.5% machinery equity opportunity cost. Budget can be used to estimate cashflow by removing depreciation and investment cost.

P&I Cost (based on \$650,000 + \$145,000 Loans) = \$126,990 + \$28,329 payments per year / 2500 acres = \$50.80 and \$11.33/acre)

Depreciation (Useage Cost) = (Total Investment - Residual Value) / Years Useful Life (eg. (\$650 - (\$650 x 25%)) / 15 = \$32.50/acre)

Investment = (Total Investment x Owned Equity %) x Investment Rate % (eg. (\$650 x 60%) x 1.5%) = \$5.85/acre)

Depreciation Cost = $\frac{\text{Original Cost} - \text{Salvage Value}}{\text{Useful Life}}$

Investment Cost = $\frac{\text{Original Cost} + \text{Salvage Value}}{2} \times \text{Investment Rate}$

Estimated Farmgate Values:

Target crop prices are based on deferred delivery contract prices for fall 2023.

Target yields are estimated based on 5 year MASC average yields.

Storage Cost:

Storage costs for each crop are based on estimated yields entered on the Summary page.

Budget assumed 60% financed at 8% for 20 years.

Farm storage requirements were assumed to cost \$3.50/bushel for 15% of the storage, \$4.50/bushel for 70% aerated storage and \$5.50/bushel for 15% hopper storage.

Profitability, Breakeven & Risk Analysis Formulas:

Gross Revenue = Price per unit x Yield per acre (eg. wheat: \$9.25/bu x 65bu/ac = \$601.25/ac)

Net Profit = Gross Revenue - Total Cost (eg. wheat: \$601.25 gross revenue - \$606.04 total cost = -\$4.79 per acre)

Operating Expense Ratio = (Operating Cost / Gross Revenue) x 100 (eg. wheat: \$388.46 operating expense / \$606.04 total cost = 64.6%)

\$ Revenue Per \$ Cost = Gross Revenue / Total Cost (eg. wheat: \$601.25 gross revenue / \$606.04 total cost = \$0.99)

Return on Investment (ROI) = (Gross Revenue - Total Cost) / Total Cost (eg. wheat: (\$601.25 gross revenue-\$606.04 total cost) / \$606.04 total cost = -0.8%)

Estimated Return on Asset (ROA) = (Margin Over Operating - Labour - Machinery Depreciation) / (Land Investment Cost + Machinery Investment Cost)

(eg. wheat: (\$212.79 margin - \$5.40 labour - \$32.50 dep.) / (\$4150 land cost + \$650.00 conv. machinery + \$145.00 special crop. mach.) = 3.10%)

Breakeven Price = Cost / Target Yield (eg. wheat cost \$606.04 / 65 bu = \$9.32 per bu)

Breakeven Yield = Cost / Target Price per Unit (eg. wheat cost \$606.04 / \$9.25 bu = 65.5 bu)

Breakeven Yield Risk Ratio = (Target Yield per Acre / Breakeven Yield) x 100 (eg. wheat yield 65 bu/ac / 65.5 bu BE = 99 %)

AgriInsurance Risk Ratio = (AgriInsurance Coverage / Operating Cost) x 100 (eg. wheat coverage \$585.73/ac / \$388.46 operating expense = 151 %)

Contact Us

For more information, contact a Farm Management Specialist.

- manitoba.ca/agriculture
- mbfarmbusiness@gov.mb.ca
- 1-844-769-6224



Contact us

- For more information, contact a Farm Management Specialist
- manitoba.ca/agriculture
- mbfarmbusiness@gov.mb.ca
- 1-844-769-6224