

Crop budgets vary greatly by operation! Prices and cost estimates are averages collected from retailers across the state. Input prices will vary by crop, management, region, varieties and other criteria and may not be reflective of YOUR true costs.

Assumptions in Analysis:

- Land charge of \$98. Purchase price is not included.
- Operating expenses borrowed at 8.5% interest for 5 months of expenses.
- Fertility rates based on MCE SFM-1 guidelines
- Assuming medium fertility levels

Fixed costs are calculated with MD Custom Rates (2021) -should use your actual fixed costs

- Crop insurance quotes. Actuals will not be set until March.

*Any fields with resistance weeds should reconsider post application products

Budgeting Recommendations:

- Create your own budgets and fixed costs including equipment, repairs, insurance, depreciation, interest and taxes
- Write and implement a farm business plan - setting goals, managing finances and develop markets
- Manage capital assets such as land and equipment
- Track your expenses and at the end of the year compare actual and projected

Using This Spreadsheet

- This workbook is designed to be updated very easily. Click on the INPUTS worksheet and make changes. This will automatically update changes on other worksheets (i.e. N changes from .47 to .54 update it on the inputs page and it automatically updates all N prices for the 5 crops)

- Be sure to save changes periodically and use the date in the title to mark when the budget was prepared.

Questions Contact: Shannon Dill, 410-822-1244 or sdill@umd.edu

www.go.umd.edu/grainmarketing

Budgets were developed by Shannon Dill, Ben Beale, Dale Johnson, Jim Lewis and Jenny Rhodes

Disclaimer - Reference in this publication to any specific commercial product, process, or service, or the use of any trade, firm, or corporation name is for general informational purposes only and does not constitute an endorsement, recommendation, or certification. Persons using such products assume responsibility for their use in accordance with current directions of the manufacturer.

EQUAL ACCESS PROGRAMS

[Inputs](#)

[Corn Grain - No Till, Non Irrigated](#)

[Corn Grain, Conventional Till, Non-Irrigated](#)

[Corn Grain - No Till, Irrigated](#)

[Corn Grain, No-Till, Poultry Litter](#)

[Corn Grain - No Till, Non Irrigated, w Weed Resistance](#)

[Soybeans - RR](#)

[Soybeans - Liberty Link](#)

[Soybeans - Xtend](#)

[Soybeans - RR, w Weed Resistance](#)

[Wheat](#)

[Wheat/Soybean Double Crop](#)

[Blank Budget](#)

[Historical](#)

	UNIT	PRICE	NOTES
YEAR		2022	
INCOME			
CORN	BUSHEL	\$5.43	<i>Dec 22</i>
SOYBEANS	BUSHEL	\$12.37	<i>Nov 22</i>
WHEAT	BUSHEL	\$7.88	<i>Jul 22</i>
EXPENSES			
SEED			
CORN CONVENTIONAL	1,000 SEEDS	\$1.68	
CORN ROUNDUP READY & BT	1,000 SEEDS	\$2.88	
SOYBEAN	1,000 SEEDS	\$0.25	
SOYBEAN RR II	1,000 SEEDS	\$0.33	
SOYBEAN LL	1,000 SEEDS	\$0.32	
SOYBEAN XTEND	1,000 SEEDS	\$0.37	
SOYBEAN ENLIST	1,000 SEEDS	\$0.36	
WHEAT (treated)	POUND	\$0.40	
FERTILIZER			
NITROGEN	POUND	\$1.02	
PHOSPHORUS	POUND	\$0.89	
POTASH	POUND	\$0.69	
SULFATE	POUND	\$0.90	
POULTRY LITTER	TON	\$25.00	
LIME	TON	\$36.00	
PESTICIDES			
2 4-D	QUART	\$6.38	
2 4-D	PINT	\$3.19	
ATRAZINE	QUART	\$4.18	
BOUNDARY	PINT	\$8.88	
CORVUS	OUNCE	\$4.65	
DUAL	PINT	\$8.13	
ENGENIA	OUNCE	\$0.77	
FLEXSTAR GT	PINT	\$3.56	
GRAMOXONE (BURNDOWN)	PINT	\$4.13	
HALEX GT	PINT	\$5.50	
HARMONY TOTAL SOL	OUNCE	\$7.90	
LIBERTY	QUART	\$12.25	
METRIBUZIN	POUND	\$19.00	
PRINCEP	QUART	\$5.50	
PROSARO	OUNCE	\$1.90	
ROUNDUP	QUART	\$14.75	
SHARPEN	OUNCE	\$5.27	
SURFACTANT	QUART	\$0.99	
STRATEGO	OUNCE	\$2.73	
TILT	OUNCE	\$0.72	
VALOR SX	OUNCE	\$3.31	
WARRIOR II	OUNCE	\$1.05	
XTENDMAX	OUNCE	\$0.62	
ZIDUA	OUNCE	\$5.32	
OTHER			
SOIL TEST	ACRE	\$0.30	
CROP INSURANCE - Corn	ACRE	\$18.32	
CROP INSURANCE - Corn Irrigated	ACRE	\$20.70	
CROP INSURANCE - Soybeans	ACRE	\$11.73	
CROP INSURANCE - Wheat	ACRE	\$9.18	
DRYING FUEL AND HANDLING	BUSHEL	\$0.35	
FIXED COSTS - 2021 Custom Rates			
STALK CHOPPING	ACRE	\$17.77	
CHISEL PLOWING	ACRE	\$21.33	
DISKING	ACRE	\$19.00	
FIELD CULTIVATOR/FINISHER	ACRE	\$19.00	

VERTICAL TILLAGE	ACRE	\$18.80
FERTILIZER SPREADING	ACRE	\$8.57
SIDEDRESSING	ACRE	\$10.07
MANURE LOADING	TON	\$4.10
MANURE SPREADING - LITTER	TON	\$7.05
MANURE HAULING	TON	\$8.60
PESTICIDE SPRAYING	ACRE	\$9.42
NOTILL DRILLING		
SMALL GRAIN	ACRE	\$21.32
PLANTING		
CORN - Conventional	ACRE	\$16.63
CORN - NoTill	ACRE	\$20.75
SOYBEAN - Conventional	ACRE	\$20.04
SOYBEAN - NoTill	ACRE	\$20.33
BROADCAST SEEDING SMGRAIN	ACRE	\$9.77
HARVESTING		
CORN	ACRE	\$34.19
SOYBEAN	ACRE	\$34.94
WHEAT	ACRE	\$34.88
HAULING	BUSHEL	\$0.19
LAND CHARGE	ACRE	\$98.00

CORN GRAIN, NO TILL, NONIRRIGATED		PER ACRE FOR			2022
ITEM	UNIT	QUANTITY	PRICE	TOTAL	
GROSS INCOME					
CORN GRAIN	BUSHEL	160	\$5.43	\$868.80	
VARIABLE COSTS					
SEED RR	1000 SEEDS	30	\$2.88	\$86.40	
SOIL TEST	ACRE	1	\$0.30	\$0.30	
NITROGEN	POUND	160	\$1.02	\$163.20	
PHOSPHATE	POUND	30	\$0.89	\$26.70	
POTASH	POUND	60	\$0.69	\$41.40	
LIME	TON	0.5	\$36.00	\$18.00	
GRAMOXONE (BURNDOWN)	PINT	1.5	\$4.13	\$6.20	
CORVUS	OUNCE	4	\$4.65	\$18.60	
ATRAZINE	QUART	0.5	\$4.18	\$2.09	
ROUNDUP (POST)*	QUART	1	\$14.75	\$14.75	
PRINCEP	QUART	1	\$5.50	\$5.50	
CROP INSURANCE (RP 70%)	ACRE	1	\$18.32	\$18.32	
DRYING FUEL	BUSHEL	160	\$0.36	\$57.60	
INTEREST ON OPERATING CAPITAL		\$377.64	0.5	8.5%	\$16.05
TOTAL VARIABLE COSTS LISTED ABOVE				\$475.10	
FIXED/OVERHEAD COSTS (CUSTOM RATES ARE USED AS A PROXY FOR FIELD OPERATION COSTS)					
FERTILIZER SPREADING	ACRE	1	\$8.57	\$8.57	
NO-TILL PLANTING WITH FERTILIZER	ACRE	1	\$20.75	\$20.75	
NITROGEN APPLICATION	ACRE	1	\$10.07	\$10.07	
PESTICIDE APPLICATIONS	ACRE	2	\$9.42	\$18.84	
HARVESTING	ACRE	1	\$34.19	\$34.19	
HAULING	BUSHEL	160	\$0.19	\$30.40	
INTEREST ON SPRING CUSTOM CHARGES		\$58.23	0.5	8.5%	\$2.47
LAND CHARGE	ACRE	1	\$98.00	\$98.00	
TOTAL FIXED COST LISTED ABOVE				\$223.29	
TOTAL VARIABLE AND FIXED COST LISTED ABOVE				\$698.40	
NET INCOME OVER VARIABLE & FIXED COSTS LISTED ABOVE				\$170.40	
PRICES (12%)					
NET INCOME ABOVE VARIABLE AND FIXED COSTS LISTED ABOVE FOR VARIOUS YIELDS AND PRICES	YIELDS (25%)	\$4.78	\$5.43	\$6.08	
	120	(\$124.99)	(\$46.80)	\$31.39	
	160	\$66.14	\$170.40	\$274.66	
	200	\$257.28	\$387.60	\$517.92	

Assumptions:

Non-continuous corn so soil insecticide may not be necessary.

If following beans add 20 lb N credit

Local hauling within 30 miles of farm

Fertility rates based on MCE SFM-1 guidelines

Assuming medium fertility levels

Bt seed corn, hybrid, mid price grade

*Any fields with resistance weeds should reconsider post application products

Sensitivity analysis based on 75%,100% and 125% of typical yield and 12% current forward contract price.

CORN GRAIN, CONVENTIONAL TILL, NON-IRRIGAT PER ACRE FOR				2022
ITEM	UNIT	QUANTITY	PRICE	TOTAL
GROSS INCOME				
CORN GRAIN	BUSHEL	160	\$5.43	\$868.80
VARIABLE COSTS				
SEED RR	1000 SEEDS	30	\$2.88	\$86.40
SOIL TEST	ACRE	1	\$0.30	\$0.30
NITROGEN	POUND	160	\$1.02	\$163.20
PHOSPHATE	POUND	30	\$0.89	\$26.70
POTASH	POUND	60	\$0.69	\$41.40
LIME	TON	0.5	\$36.00	\$18.00
CORVUS	OUNCE	4	\$4.65	\$18.60
ATRAZINE	QUART	0.5	\$4.18	\$2.09
PRINCEP	QUART	1	\$5.50	\$5.50
ROUNDUP POST*	QUART	1	\$14.75	\$14.75
CROP INSURANCE (RP 70%)	ACRE	1	\$18.32	\$18.32
DRYING FUEL	BUSHEL	160	\$0.36	\$57.60
INTEREST ON OPERATING CAPITAL	\$356.69	0.5	8.5%	\$15.16
TOTAL VARIABLE COSTS LISTED ABOVE				\$468.02
FIXED/OVERHEAD COSTS (CUSTOM RATES ARE USED AS A PROXY FOR FIELD OPERATION COSTS)				
CHISEL PLOWING	ACRE	1	\$21.33	\$21.33
DISKING	ACRE	1	\$19.00	\$19.00
FIELD CULTIVATOR/FINISHER	ACRE	1	\$19.00	\$19.00
FERTILIZER SPREADING	ACRE	1	\$8.57	\$8.57
PLANTING WITH FERTILIZER	ACRE	1	\$16.63	\$16.63
NITROGEN APPLICATION	ACRE	1	\$10.07	\$10.07
PESTICIDE APPLICATIONS	ACRE	2	\$9.42	\$18.84
HARVESTING	ACRE	1	\$34.19	\$34.19
HAULING	BUSHEL	160	\$0.19	\$30.40
INTEREST ON SPRING CUSTOM CHARGES	\$113.44	0.5	8.5%	\$4.82
LAND CHARGE	ACRE	1	\$98.00	\$98.00
TOTAL FIXED COST LISTED ABOVE				\$280.85
TOTAL VARIABLE AND FIXED COST LISTED ABOVE				\$748.87
NET INCOME OVER VARIABLE & FIXED COSTS LISTED ABOVE				\$119.93
			PRICES (12%)	
NET INCOME ABOVE VARIABLE AND FIXED COSTS LISTED ABOVE FOR VARIOUS YIELDS AND PRICES	YIELDS (25%)	\$4.78	\$5.43	\$6.08
	120	(\$175.46)	(\$97.27)	(\$19.08)
	160	\$15.67	\$119.93	\$224.19
	200	\$206.81	\$337.13	\$467.45

Assumptions:

Non-continuous corn so soil insecticide may not be necessary.

Local hauling within 30 miles of farm

Fertility rates based on MCE SFM-1 guidelines

Assuming medium fertility levels

Bt seed corn, hybrid, mid price grade

*Any fields with resistance weeds should reconsider post application products

Sensitivity analysis based on 75%,100% and 125% of typical yield and 12% current forward contract price.

CORN GRAIN, NO-TILL IRRIGATED		PER ACRE FOR			2022
ITEM	UNIT	QUANTITY	PRICE	TOTAL	
GROSS INCOME					
CORN GRAIN	BUSHEL	230	\$5.43	\$1,248.90	
VARIABLE COSTS					
SEED RR	1000 SEEDS	36	\$2.88	\$103.68	
SOIL TEST	ACRE	1	\$0.30	\$0.30	
NITROGEN	POUND	230	\$1.02	\$234.60	
PHOSPHATE	POUND	45	\$0.89	\$40.05	
POTASH	POUND	100	\$0.69	\$69.00	
LIME	TON	0.5	\$36.00	\$18.00	
GRAMOXONE (BURNDOWN)	PINT	1.5	\$4.13	\$6.20	
CORVUS	OUNCE	4	\$4.65	\$18.60	
ATRAZINE	QUART	0.5	\$4.18	\$2.09	
ROUNDUP (POST)*	QUART	1	\$14.75	\$14.75	
STRATEGO	OUNCE	4	\$2.73	\$10.92	
PRINCEP	QUART	1	\$5.50	\$5.50	
CROP INSURANCE (RP 70%)	ACRE	1	\$20.70	\$20.70	
DRYING FUEL	BUSHEL	230	\$0.35	\$80.50	
IRRIGATION EXPENSE (electric, fuel, etc)	INCH	10	\$7.78	\$77.80	
IRRIGATION REPAIR & MAINTENANCE	ACRE	1	\$10.00	\$10.00	
INTEREST ON OPERATING CAPITAL	\$507.27	0.5	8.5%	\$21.56	
TOTAL VARIABLE COSTS LISTED ABOVE				\$734.24	
FIXED/OVERHEAD COSTS (CUSTOM RATES ARE USED AS A PROXY FOR FIELD OPERATION COSTS)					
FERTILIZER SPREADING	ACRE	1	\$8.57	\$8.57	
NO-TILL PLANTING WITH FERTILIZER	ACRE	1	\$20.75	\$20.75	
NITROGEN APPLICATION	ACRE	1	\$10.07	\$10.07	
PESTICIDE APPLICATIONS	ACRE	2	\$9.42	\$18.84	
HARVESTING	ACRE	1	\$34.19	\$34.19	
HAULING	BUSHEL	230	\$0.19	\$43.70	
INTEREST ON SPRING CUSTOM CHARGES	\$58.23	0.5	8.5%	\$2.47	
IRRIGATION PAYMENT (including interest)	ACRE	1	\$150.00	\$150.00	
LAND CHARGE	ACRE	1	\$98.00	\$98.00	
TOTAL FIXED COST LISTED ABOVE				\$386.59	
TOTAL VARIABLE AND FIXED COST LISTED ABOVE				\$1,120.84	
NET INCOME OVER VARIABLE & FIXED COSTS LISTED ABOVE				\$128.06	
		PRICES (12%)			
NET INCOME ABOVE VARIABLE AND FIXED COSTS LISTED ABOVE FOR VARIOUS YIELDS AND PRICES	YIELDS (25%)	\$4.78	\$5.43	\$6.08	
	172.5	(\$296.56)	(\$184.16)	(\$71.76)	
	230	(\$21.81)	\$128.06	\$277.93	
	287.5	\$252.95	\$440.29	\$627.62	

Assumptions:

Non-continuous corn so soil insecticide may not be necessary.

If following beans add 20 lb N credit

Local hauling within 30 miles of farm

Fertility rates based on MCE SFM-1 guidelines

Assuming medium fertility levels

Bt seed corn, hybrid, mid price grade

*Any fields with resistance weeds should reconsider post application products

Sensitivity analysis based on 75%,100% and 125% of typical yield and 12% current forward contract price.

Average variable cost for irrigation (electric, diesel, gas) = \$7.78/inch

Average variable cost for irrigation (repair/maintenance) = \$10/acre

Average fixed cost (irrigation payments) =-\$150/acre

CORN GRAIN, NO-TILL, POULTRY LITTER		PER ACRE FOR			2022
ITEM	UNIT	QUANTITY	PRICE	TOTAL	
GROSS INCOME					
CORN GRAIN	BUSHEL	160	\$5.43	\$868.80	
VARIABLE COSTS					
SEED RR	1000 SEEDS	30	\$2.88	\$86.40	
SOIL TEST	ACRE	1	\$0.30	\$0.30	
NITROGEN	POUND	80	\$1.02	\$81.60	
PHOSPHATE	POUND	0	\$0.89	\$0.00	
POTASH	POUND	0	\$0.69	\$0.00	
POULTRY LITTER (57-99-113)	TON	2	\$25.00	\$50.00	
LIME	TON	0.5	\$36.00	\$18.00	
GRAMOXONE (BURNDOWN)	PINT	1.5	\$4.13	\$6.20	
CORVUS	OUNCE	4	\$4.65	\$18.60	
ATRAZINE	QUART	0.5	\$4.18	\$2.09	
ROUNDUP POST*	QUART	1	\$14.75	\$14.75	
PRINCEP	QUART	1	\$5.50	\$5.50	
CROP INSURANCE (RP 70%)	ACRE	1	\$18.32	\$18.32	
DRYING FUEL	BUSHEL	160	\$0.35	\$56.00	
INTEREST ON OPERATING CAPITAL	\$277.94	0.5	8.5%	\$11.81	
TOTAL VARIABLE COSTS LISTED ABOVE				\$369.57	
FIXED/OVERHEAD COSTS (CUSTOM RATES ARE USED AS A PROXY FOR FIELD OPERATION COSTS)					
MANURE HAULING	TON	2	\$8.60	\$17.20	
MANURE LOADING	TON	2	\$4.10	\$8.20	
MANURE SPREADING - LITTER	TON	2	\$7.05	\$14.10	
MINIMAL TILLAGE	ACRE	1	\$18.80	\$18.80	
NO-TILL PLANTING	ACRE	1	\$20.75	\$20.75	
NITROGEN APPLICATION	ACRE	1	\$10.07	\$10.07	
PESTICIDE APPLICATIONS	ACRE	2	\$9.42	\$18.84	
HARVESTING	ACRE	1	\$34.19	\$34.19	
HAULING	BUSHEL	160	\$0.19	\$30.40	
INTEREST ON SPRING CUSTOM CHARGES	\$90.76	0.5	8.5%	\$3.86	
LAND CHARGE	ACRE	1	\$98.00	\$98.00	
TOTAL FIXED COST LISTED ABOVE				\$274.41	
TOTAL VARIABLE AND FIXED COST LISTED ABOVE				\$643.97	
NET INCOME OVER VARIABLE & FIXED COSTS LISTED ABOVE				\$224.83	
PRICES (12%)					
NET INCOME ABOVE VARIABLE AND	YIELDS (25%)	\$4.78	\$5.43	\$6.08	
FIXED COSTS LISTED ABOVE FOR	120	(\$70.57)	\$7.63	\$85.82	
VARIOUS YIELDS AND PRICES	160	\$120.57	\$224.83	\$329.08	
	200	\$311.71	\$442.03	\$572.35	

Assumptions:

Non-continuous corn so soil insecticide may not be necessary.

If following beans add 20 lb N credit

Local hauling within 30 miles of farm

Fertility rates based on MCE SFM-1 guidelines

Assuming medium fertility levels

Bt seed corn, hybrid, mid price grade

Poultry litter estimates - Economic Value of Poultry Litter 2002. Lichtenberg, Parker, Lynch.

Litter will provide nitrogen availability at year 2 20% and year 3 5%

*Any fields with resistance weeds should reconsider post application products

Sensitivity analysis based on 75%,100% and 125% of typical yield and 12% current forward contract price.

CORN GRAIN, NO-TILL NON-IRR wWEED RESISTANCE			PER ACRE	2022
ITEM	UNIT	QUANTITY	PRICE	TOTAL
GROSS INCOME				
CORN GRAIN	BUSHEL	160	\$5.43	\$868.80
VARIABLE COSTS				
SEED RR	1000 SEEDS	30	\$2.88	\$86.40
SOIL TEST	ACRE	1	\$0.30	\$0.30
NITROGEN	POUND	160	\$1.02	\$163.20
PHOSPHATE	POUND	30	\$0.89	\$26.70
POTASH	POUND	60	\$0.69	\$41.40
LIME	TON	0.5	\$36.00	\$18.00
GRAMOXONE (BURNDOWN)	PINT	1.5	\$4.13	\$6.20
ATRAZINE	QUART	0.5	\$4.18	\$2.09
PRINCEP	QUART	1	\$5.50	\$5.50
HALEX GT	PINT	4	\$5.50	\$22.00
CROP INSURANCE (RP 70%)	ACRE	1	\$18.32	\$18.32
DRYING FUEL	BUSHEL	160	\$0.36	\$57.60
INTEREST ON OPERATING CAPITAL	\$344.29	0.5	8.5%	\$14.63
TOTAL VARIABLE COSTS LISTED ABOVE				\$462.34
FIXED/OVERHEAD COSTS (CUSTOM RATES ARE USED AS A PROXY FOR FIELD OPERATION COSTS)				
FERTILIZER SPREADING	ACRE	1	\$8.57	\$8.57
NO-TILL PLANTING WITH FERTILIZER	ACRE	1	\$20.75	\$20.75
NITROGEN APPLICATION	ACRE	1	\$10.07	\$10.07
PESTICIDE APPLICATIONS	ACRE	2	\$9.42	\$18.84
HARVESTING	ACRE	1	\$34.19	\$34.19
HAULING	BUSHEL	160	\$0.19	\$30.40
INTEREST ON SPRING CUSTOM CHARGES	\$58.23	0.5	8.5%	\$2.47
LAND CHARGE	ACRE	1	\$98.00	\$98.00
TOTAL FIXED COST LISTED ABOVE				\$223.29
TOTAL VARIABLE AND FIXED COST LISTED ABOVE				\$685.63
NET INCOME OVER VARIABLE & FIXED COSTS LISTED ABOVE				\$183.17
			PRICES (12%)	
NET INCOME ABOVE VARIABLE AND FIXED COSTS LISTED ABOVE FOR VARIOUS YIELDS AND PRICES	YIELDS (25%)	\$4.78	\$5.43	\$6.08
	120	(\$112.22)	(\$34.03)	\$44.16
	160	\$78.91	\$183.17	\$287.42
	200	\$270.05	\$400.37	\$530.69

Assumptions:

Non-continuous corn so soil insecticide may not be necessary.

If following beans add 20 lb N credit

Local hauling within 30 miles of farm

Fertility rates based on MCE SFM-1 guidelines

Assuming medium fertility levels

Bt seed corn, hybrid, mid price grade

Sensitivity analysis based on 75%,100% and 125% of typical yield and 12% current forward contract price.

SOYBEANS RR READY		PER ACRE FOR			2022
ITEM	UNIT	QUANTITY	PRICE	TOTAL	
GROSS INCOME					
SOYBEANS	BUSHEL	60	\$12.37	\$742.20	
VARIABLE COSTS					
SEED	1000 SEEDS	150	\$0.33	\$49.50	
SOIL TESTING	ACRE	1	\$0.30	\$0.30	
PHOSPHATE	POUND	45	\$0.89	\$40.05	
POTASH	POUND	40	\$0.69	\$27.60	
LIME	TON	0.5	\$36.00	\$18.00	
GRAMOXONE (BURNDOWN)	PINT	2	\$4.13	\$8.26	
2 4-D	PINT	1	\$3.19	\$3.19	
ROUNDUP (2 PASSES)*	QUART	2	\$14.75	\$29.50	
WARRIOR II	OUNCE	1.92	\$1.05	\$2.02	
CROP INSURANCE (RP 70%)	ACRE	1	\$11.73	\$11.73	
INTEREST ON OPERATING CAPITAL		\$178.42	0.5	8.5%	\$7.58
TOTAL VARIABLE COSTS LISTED ABOVE				\$197.73	
FIXED/OVERHEAD COSTS (CUSTOM RATES ARE USED AS A PROXY FOR FIELD OPERATION COSTS)					
FERTILIZER APPLICATION	ACRE	1	\$8.57	\$8.57	
SOYBEAN - NoTill	ACRE	1	\$20.33	\$20.33	
PESTICIDE APPLICATIONS	ACRE	3	\$9.42	\$28.26	
HARVESTING	ACRE	1	\$34.94	\$34.94	
HAULING	BUSHEL	60	\$0.19	\$11.40	
INTEREST ON SPRING CUSTOM CHARGES		\$57.16	0.5	8.5%	\$2.43
LAND CHARGE	ACRE	1	\$98.00	\$98.00	
TOTAL FIXED COST LISTED ABOVE				\$203.93	
TOTAL VARIABLE AND FIXED COST LISTED ABOVE				\$401.66	
NET INCOME OVER VARIABLE & FIXED COSTS LISTED ABOVE				\$340.54	
		<u>YIELDS (25%)</u>		<u>PRICES (12%)</u>	
NET INCOME ABOVE VARIABLE AND FIXED COSTS LISTED ABOVE FOR VARIOUS YIELDS AND PRICES		45	\$10.89	\$12.37	\$13.85
		60	\$88.19	\$154.99	\$221.79
		60	\$251.48	\$340.54	\$429.61
		75	\$414.76	\$526.09	\$637.42

Assumptions

Fertility rates based on MCE SFM-1 guidelines

Assuming medium fertility levels

Local hauling within 30 miles of farm

*Any fields with resistance weeds should reconsider post application products

Sensitivity analysis based on 75%,100% and 125% of typical yield and 12% current forward contract price.

SOYBEANS LIBERTY LINK		PER ACRE FOR			2022
ITEM	UNIT	QUANTITY	PRICE	TOTAL	
GROSS INCOME					
SOYBEANS	BUSHEL	60	\$12.37	\$742.20	
VARIABLE COSTS					
SEED	1000 SEEDS	150	\$0.32	\$48.00	
SOIL TESTING	ACRE	1	\$0.30	\$0.30	
PHOSPHATE	POUND	45	\$0.89	\$40.05	
POTASH	POUND	40	\$0.69	\$27.60	
LIME	TON	0.5	\$36.00	\$18.00	
GRAMOXONE	PINT	2	\$4.13	\$8.26	
2 4-D	PINT	1	\$3.19	\$3.19	
WARRIOR II	OUNCE	1.92	\$1.05	\$2.02	
DUAL	PINT	1.5	\$8.13	\$12.20	
LIBERTY	QUART	1	\$12.25	\$12.25	
SPRAY GRADE SULFATE WITH LIBERTY	POUND	2	\$0.90	\$1.80	
CROP INSURANCE (RP 70%)	ACRE	1	\$11.73	\$11.73	
INTEREST ON OPERATING CAPITAL		\$147.42	0.5	8.5%	\$6.27
TOTAL VARIABLE COSTS LISTED ABOVE				\$191.66	
FIXED/OVERHEAD COSTS (CUSTOM RATES ARE USED AS A PROXY FOR FIELD OPERATION COSTS)					
FERTILIZER APPLICATION	ACRE	1	\$8.57	\$8.57	
SOYBEAN - NoTill	ACRE	1	\$20.33	\$20.33	
PESTICIDE APPLICATIONS	ACRE	3	\$9.42	\$28.26	
HARVESTING	ACRE	1	\$34.94	\$34.94	
HAULING	BUSHEL	60	\$0.19	\$11.40	
INTEREST ON SPRING CUSTOM CHARGES		\$57.16	0.5	8.5%	\$2.43
					\$0.00
					\$0.00
LAND CHARGE	ACRE	1	98.00	\$98.00	
TOTAL FIXED COST LISTED ABOVE				\$203.93	
TOTAL VARIABLE AND FIXED COST LISTED ABOVE				\$395.59	
NET INCOME OVER VARIABLE & FIXED COSTS LISTED ABOVE				\$346.61	
		<u>YIELDS (25%)</u>		<u>PRICES (12%)</u>	
NET INCOME ABOVE VARIABLE AND FIXED COSTS LISTED ABOVE FOR VARIOUS YIELDS AND PRICES		45	\$10.89	\$12.37	\$13.85
		60	\$94.27	\$161.06	\$227.86
		60	\$257.55	\$346.61	\$435.68
		75	\$420.83	\$532.16	\$643.49

Assumptions

Fertility rates based on MCE SFM-1 guidelines

Assuming medium fertility levels

Local hauling within 30 miles of farm

Sensitivity analysis based on 75%,100% and 125% of typical yield and 12% current forward contract price.

SOYBEANS XTEND		PER ACRE FOR			2022
ITEM	UNIT	QUANTITY	PRICE	TOTAL	
GROSS INCOME					
SOYBEANS	BUSHEL	60	\$12.37	\$742.20	
VARIABLE COSTS					
SEED	1000 SEEDS	150	\$0.37	\$55.50	
SOIL TESTING	ACRE	1	\$0.30	\$0.30	
PHOSPHATE	POUND	45	\$0.89	\$40.05	
POTASH	POUND	40	\$0.69	\$27.60	
LIME	TON	0.5	\$36.00	\$18.00	
GRAMOXONE	PINT	2	\$4.13	\$8.26	
2 4-D	PINT	1	\$3.19	\$3.19	
WARRIOR II	OUNCE	1.92	\$1.05	\$2.02	
DUAL	PINT	1	\$8.13	\$8.13	
XTENDIMAX	OUNCE	22	\$0.62	\$13.64	
SURFACTANT	QUART	1	\$0.99	\$0.99	
CROP INSURANCE (RP 70%)	ACRE	1	\$11.73	\$11.73	
INTEREST ON OPERATING CAPITAL	\$154.92	0.5	8.5%	\$6.58	
TOTAL VARIABLE COSTS LISTED ABOVE				\$195.99	
FIXED/OVERHEAD COSTS (CUSTOM RATES ARE USED AS A PROXY FOR FIELD OPERATION COSTS)					
FERTILIZER APPLICATION	ACRE	1	\$8.57	\$8.57	
SOYBEAN - NoTill	ACRE	1	\$20.33	\$20.33	
PESTICIDE APPLICATIONS	ACRE	3	\$9.42	\$28.26	
HARVESTING	ACRE	1	\$34.94	\$34.94	
HAULING	BUSHEL	60	\$0.19	\$11.40	
INTEREST ON SPRING CUSTOM CHARGES	\$57.16	0.5	8.5%	\$2.43	
				\$0.00	
				\$0.00	
LAND CHARGE	ACRE	1	98.00	\$98.00	
TOTAL FIXED COST LISTED ABOVE				\$203.93	
TOTAL VARIABLE AND FIXED COST LISTED ABOVE				\$399.92	
NET INCOME OVER VARIABLE & FIXED COSTS LISTED ABOVE				\$342.28	
		PRICES (12%)			
NET INCOME ABOVE VARIABLE AND FIXED COSTS LISTED ABOVE FOR VARIOUS YIELDS AND PRICES	YIELDS (25%)	\$9.28	\$12.37		
	45	\$17.57	\$156.73	\$295.89	
	60	\$156.73	\$342.28	\$527.83	
	75	\$295.89	\$527.83	\$759.77	

Assumptions

Fertility rates based on MCE SFM-1 guidelines

Assuming medium fertility levels

Local hauling within 30 miles of farm

Sensitivity analysis based on 75%,100% and 125% of typical yield and 12% current forward contract price.

SOYBEANS RR READY wWEED RESISTANCE		PER ACRE FOR			2022
ITEM	UNIT	QUANTITY	PRICE	TOTAL	
GROSS INCOME					
SOYBEANS w/PALMER CONTROL	BUSHEL	60	\$12.37	\$742.20	
VARIABLE COSTS					
SEED	1000 SEEDS	150	\$0.33	\$49.50	
SOIL TESTING	ACRE	1	\$0.30	\$0.30	
PHOSPHATE	POUND	45	\$0.89	\$40.05	
POTASH	POUND	40	\$0.69	\$27.60	
LIME	TON	0.5	\$36.00	\$18.00	
GRAMOXONE	PINT	2	\$4.13	\$8.26	
2 4-D	PINT	1	\$3.19	\$3.19	
VALOR SX	OUNCE	3	\$3.31	\$9.93	
WARRIOR II	OUNCE	1.92	\$1.05	\$2.02	
ZIDUA	OUNCE	3	\$5.32	\$15.96	
FLEXSTAR GT	PINT	3.5	\$3.56	\$12.46	
CROP INSURANCE (RP 70%)	ACRE	1	\$11.73	\$11.73	
INTEREST ON OPERATING CAPITAL		\$158.85	0.5	8.5%	\$6.75
TOTAL VARIABLE COSTS LISTED ABOVE					\$205.75
FIXED/OVERHEAD COSTS (CUSTOM RATES ARE USED AS A PROXY FOR FIELD OPERATION COSTS)					
FERTILIZER APPLICATION	ACRE	1	\$8.57	\$8.57	
SOYBEAN - NoTill Planting	ACRE	1	\$20.33	\$20.33	
PESTICIDE APPLICATIONS	ACRE	3	\$9.42	\$28.26	
HARVESTING	ACRE	1	\$34.94	\$34.94	
HAULING	BUSHEL	60	\$0.19	\$11.40	
INTEREST ON SPRING CUSTOM CHARGES		\$57.16	0.5	8.5%	\$2.43
LAND CHARGE	ACRE	1	\$98.00	\$98.00	
TOTAL FIXED COST LISTED ABOVE					\$203.93
TOTAL VARIABLE AND FIXED COST LISTED ABOVE					\$409.68
NET INCOME OVER VARIABLE & FIXED COSTS LISTED ABOVE					\$332.52
		PRICES (12%)			
NET INCOME ABOVE VARIABLE AND FIXED COSTS LISTED ABOVE FOR VARIOUS YIELDS AND PRICES	YIELDS (25%)	\$10.89	\$12.37	\$13.85	
	45	\$80.18	\$146.97	\$213.77	
	60	\$243.46	\$332.52	\$421.59	
	75	\$406.74	\$518.07	\$629.40	

Assumptions

Fertility rates based on MCE SFM-1 guidelines

Assuming medium fertility levels

Local hauling within 30 miles of farm

Sensitivity analysis based on 75%,100% and 125% of typical yield and 12% current forward contract price.

WHEAT		PER ACRE FOR			2022
ITEM	UNIT	QUANTITY	PRICE	TOTAL	
GROSS INCOME					
WHEAT	BUSHEL	75	\$7.88	\$591.00	
VARIABLE COSTS					
SEED	POUND	150	\$0.40	\$60.00	
SOIL TESTING	ACRE	1	\$0.30	\$0.30	
NITROGEN	POUND	70	\$1.02	\$71.40	
PHOSPHATE	POUND	40	\$0.89	\$35.60	
POTASH	POUND	40	\$0.69	\$27.60	
LIME	TON	0.5	\$36.00	\$18.00	
HARMONY TOTAL SOL	OUNCE	0.8	\$7.90	\$6.32	
SURFACTANT	QUART	1	\$0.99	\$0.99	
TILT	OUNCE	2	\$0.72	\$1.44	
ZIDUA	OUNCE	1.5	\$5.32	\$7.98	
PROSARO	OUNCE	6.5	\$1.90	\$12.35	
WARRIOR II	OUNCE	3	\$1.05	\$3.15	
CROP INSURANCE (RP 70%)	ACRE	1.00	\$9.18	\$9.18	
INTEREST ON OPERATING CAPITAL		\$241.98	0.5	8.5%	\$10.28
TOTAL VARIABLE COSTS LISTED ABOVE				\$264.59	
FIXED/OVERHEAD COSTS (CUSTOM RATES ARE USED AS A PROXY FOR FIELD OPERATION COSTS)					
SPREADING FERTILIZER	ACRE	1	\$8.57	\$8.57	
VERTICAL TILLAGE	ACRE	2	\$18.80	\$37.60	
BROADCAST SEEDING	ACRE	1	\$9.77	\$9.77	
PESTICIDE APPLICATION	ACRE	2	\$9.42	\$18.84	
HARVESTING	ACRE	1	\$34.88	\$34.88	
HAULING	BUSHEL	75	\$0.19	\$14.25	
INTEREST ON FALL CUSTOM CHARGES		\$74.78	0.5	8.5%	\$3.18
LAND CHARGE	ACRE	1	\$98.00	\$98.00	
TOTAL FIXED COST LISTED ABOVE				\$225.09	
TOTAL VARIABLE AND FIXED COST LISTED ABOVE				\$489.68	
NET INCOME OVER VARIABLE & FIXED COSTS LISTED ABOVE				\$101.32	
		PRICES (12%)			
NET INCOME ABOVE VARIABLE AND FIXED COSTS LISTED ABOVE FOR VARIOUS YIELDS AND PRICES	<u>YIELDS (25%)</u>	\$6.93	\$7.88	\$8.83	
	56.25	(\$99.62)	(\$46.43)	\$6.76	
	75	\$30.40	\$101.32	\$172.24	
	93.75	\$160.42	\$249.07	\$337.72	

Assumptions

Local hauling within 30 miles of farm

Fertility rates based on MCE SFM-1 guidelines

Assuming medium fertility levels

Sensitivity analysis based on 75%,100% and 125% of typical yield and 12% current forward contract price.

WHEAT/SOYBEAN DOUBLE CROP		PER ACRE FOR			2022
ITEM	UNIT	QUANTITY	PRICE	TOTAL	
GROSS INCOME					
WHEAT	BUSHEL	75	\$7.88	\$591.00	
SOYBEANS	BUSHEL	50	\$12.37	\$618.50	
TOTAL GROSS INCOME				\$1,209.50	
VARIABLE COSTS					
SEED-WHEAT	POUND	150	\$0.40	\$60.00	
SEED-SOYBEANS	1000 SEEDS	175	\$0.33	\$57.75	
SOIL TEST	ACRE	1	\$0.30	\$0.30	
NITROGEN	POUND	70	\$1.02	\$71.40	
PHOSPHATE	POUND	85	\$0.89	\$75.65	
POTASH	POUND	75	\$0.69	\$51.75	
LIME	TON	0.5	\$36.00	\$18.00	
HARMONY TOTAL SOL	OUNCE	0.5	\$7.90	\$3.95	
ZIDUA	OUNCE	1.5	\$5.32	\$14.75	
SURFACTANT	QUART	1	\$2.25	\$2.25	
TILT	OUNCE	2	\$0.72	\$1.44	
WARRIOR II	OUNCE	3.84	\$1.05	\$4.03	
2 4-D	PINT	1	\$3.19	\$3.19	
PROSARO	OUNCE	6.5	\$1.90	\$12.35	
ROUNDUP	QUART	1	\$14.75	\$14.75	
CROP INSURANCE-WHEAT (RP 70%)	ACRE	1.00	\$9.18	\$9.18	
CROP INSURANCE-BEANS (RP 70%)	ACRE	1.00	\$11.73	\$11.73	
INTEREST ON OPERATING CAPITAL	\$391.56	0.50	8.5%	\$16.64	
TOTAL VARIABLE COSTS LISTED ABOVE				\$429.11	
NET INCOME OVER VARIABLE COSTS LISTED ABOVE				\$780.39	
FIXED/OVERHEAD COSTS (CUSTOM RATES ARE USED AS A PROXY FOR FIELD OPERATION COSTS)					
FERTILIZER SPREADING	ACRE	2	\$8.57	\$17.14	
VERTICAL TILLAGE	ACRE	2	\$18.80	\$37.60	
BROADCAST SEEDING	ACRE	1	\$9.77	\$9.77	
NOTILL DRILLING	ACRE	1	\$21.32	\$21.32	
PESTICIDE APPLICATION	ACRE	4	\$9.42	\$37.68	
HARVESTING	ACRE	2	\$34.88	\$69.76	
HAULING	BUSHEL	125	\$0.19	\$23.75	
INTEREST ON FALL/SPRING CUSTOM CHARGE	\$123.51	0.5	8.5%	\$5.25	
LAND CHARGE	ACRE	1	\$98.00	\$98.00	
TOTAL FIXED COST LISTED ABOVE				\$320.27	
TOTAL VARIABLE AND FIXED COST LISTED ABOVE				\$749.38	
NET INCOME OVER VARIABLE & FIXED COSTS LISTED ABOVE				\$460.12	

		PRICES (12%)			
		WHEAT		BEAN	
NET INCOME ABOVE VARIABLE AND			\$6.93	\$7.88	\$8.83
FIXED COSTS LISTED ABOVE FOR			\$10.89	\$12.37	\$13.85
VARIOUS YIELDS AND PRICES	56	38	\$48.89	\$157.74	\$266.60
	75	50	\$314.98	\$460.12	\$605.26
<i>Sensitivity Analysis based on soybeans/wheat yield and price</i>	94	63	\$581.07	\$762.49	\$943.92

Assumptions

Local hauling within 30 miles of farm

Fertility rates based on MCE SFM-1 guidelines

Assuming medium fertility levels

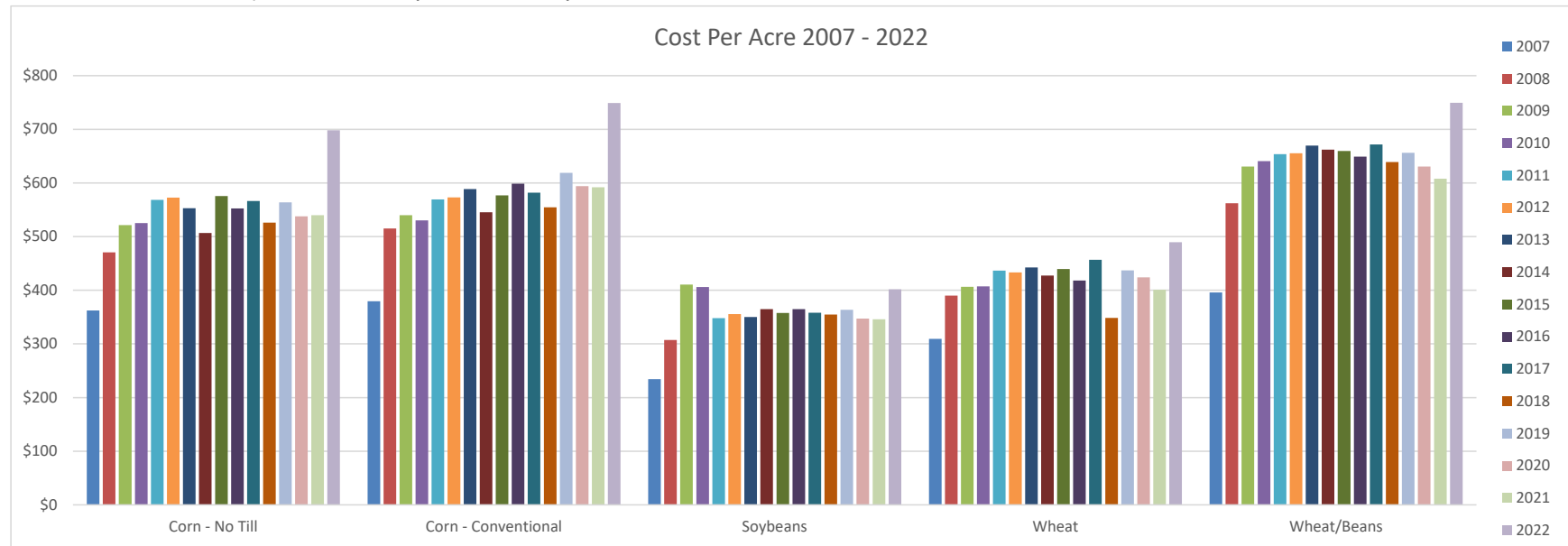
1 Post-plant bean glyphosate application

Sensitivity analysis based on 75%,100% and 125% of yield of beans and current forward contract price of beans/wheat.

CROP:		YEAR:		
ITEM	UNIT	QUANTITY	PRICE	TOTAL
GROSS INCOME				
VARIABLE COSTS				
SEED				
SOIL TEST				
NITROGEN				
PHOSPHATE				
POTASH				
LIME				
PESTICIDES				
CROP INSURANCE				
DRYING FUEL				
INTEREST ON OPERATING CAPITAL				
TOTAL VARIABLE COSTS LISTED ABOVE				
FIXED/OVERHEAD COSTS (CUSTOM RATES ARE USED AS A PROXY FOR FIELD OPERATION COSTS)				
LAND CHARGE				
TOTAL FIXED COST LISTED ABOVE				
TOTAL VARIABLE AND FIXED COST LISTED ABOVE				
NET INCOME OVER VARIABLE & FIXED COSTS LISTED ABOVE				

Cost Per Acre						
	Corn - No Till	Corn - Conventional	Soybeans	Wheat	Wheat/Beans	
2007	\$362	\$379	\$234	\$309	\$396	
2008	\$471	\$515	\$307	\$390	\$562	
2009	\$521	\$540	\$411	\$406	\$631	
2010	\$525	\$530	\$406	\$407	\$641	
2011	\$569	\$569	\$348	\$437	\$654	
2012	\$573	\$573	\$356	\$433	\$656	
2013	\$553	\$589	\$350	\$442	\$670	
2014	\$507	\$546	\$365	\$427	\$662	
2015	\$576	\$577	\$358	\$440	\$660	
2016	\$552	\$599	\$365	\$418	\$649	
2017	\$566	\$582	\$358	\$457	\$672	
2018	\$526	\$555	\$355	\$349	\$639	
2019	\$564	\$619	\$363	\$437	\$656	
2020	\$538	\$594	\$347	\$424	\$631	
2021	\$540	\$592	\$346	\$401	\$608	
2022	\$698	\$749	\$402	\$490	\$749	

** Historical Chart is based on prices in the January - March of each year



Cost Per Acre 2022					
	Corn - No Till	Corn - Conventional	Soybeans	Wheat	Wheat/Beans
2022	\$692	\$743	\$396	\$485	\$739
Increase	23%	21%	14%	18%	19%

Cost Per Acre 2022

