

	A	B	C	D	E	F	G	H	I	J
2		1. Select County		Wayne						
3		2. Select Crop		Corn						
6		Case Farm Information								
7		County: Wayne	Crop: Corn				Farm Yield	County Yield		
8		Farm Average Yield	124.2 bu./acre				bu./acre	bu./acre		
9		Farm St. Dev. of yield	27.16 bu./acre			30% of years yields below:	110.82	114.00		
10		County Average Yield	124.2 bu./acre			20% of years yields below:	101.36	106.26		
11		County St. Dev. of yield	21.82 bu./acre			10% of years yields below:	87.87	94.95		
12		Average Futures Price	\$2.40 /bu			5% of years yields below:	76.63	85.23		
13		St. Dev. of Price	\$0.53 /bu			Farm APH	124	bu./acre		
14		Local Cash Basis	\$0.25 /bu			Average Gross Crop Rev.	\$283.22	/acre		
17		VARs								Enter custom
18		% above =	90%	85%	80%	75%	70%	50%	95.00%	
19		% below =	10%	15%	20%	25%	30%	50%	5.00%	
20		Farm Yield	87.87	95.42	101.36	106.38	110.82	125.75	76.63	
21		County Yield	94.95	101.32	106.26	110.38	114.00	125.94	85.23	
22		Price	\$1.78	\$1.87	\$1.95	\$2.03	\$2.09	\$2.34	\$1.64	
23		Crop Rev./acre	\$203.33	\$219.84	\$232.28	\$243.62	\$252.31	\$282.41	\$180.41	
27		Insurance Information								
29		Estimated Premiums - \$/Per acre								
30		Coverage Election	APH	RA-BP	RA-HP	CRC	GRP	GRIP	hp grip-hpo	PR
32		50%	\$2.16			\$2.60				
33		55%	\$2.80			\$3.97				
34		60%	\$3.33			\$4.81				
35		65%	\$4.51	\$4.74	\$6.41	\$6.63				
36		70%	\$5.66	\$6.30	\$8.45	\$8.45	\$3.77	\$2.95	\$5.73	
37		75%	\$7.75	\$9.04	\$12.04	\$11.78	\$4.78	\$4.19	\$7.62	
38		80%	\$11.89	\$13.48	\$17.80	\$18.17	\$6.92	\$6.80	\$11.71	
39		85%	\$18.99	\$20.48	\$26.82	\$28.98	\$8.74	\$9.38	\$15.38	
40		90%					\$11.95	\$14.02	\$21.59	
43		Average Insurance Payments/Acre								
44		Coverage Election	APH	RA-BP	RA-HP	CRC	GRP	GRIP	hp grip-hpo	PA
46		50%	\$0.30			\$0.45				
47		55%	\$0.57			\$0.87				
48		60%	\$1.00			\$1.63				
49		65%	\$1.68	\$1.54	\$3.03	\$2.85				
50		70%	\$2.73	\$2.66	\$4.97	\$4.70	\$1.73	\$1.07	\$2.38	
51		75%	\$4.24	\$4.29	\$7.72	\$7.34	\$2.72	\$2.18	\$4.12	
52		80%	\$6.37	\$6.66	\$11.54	\$11.03	\$4.16	\$4.02	\$6.77	
53		85%	\$9.24	\$9.87	\$16.68	\$15.99	\$6.16	\$6.81	\$10.69	
54		90%					\$8.89	\$10.72	\$16.05	
57		Frequency of payment								
58		Coverage Election	APH	RA-BP	RA-HP	CRC	GRP	GRIP	hp grip-hpo	FR
60		50%	1.46%			1.84%				
61		55%	2.44%			3.30%				
62		60%	4.00%			5.92%				
63		65%	6.20%	6.10%	9.38%	9.04%				
64		70%	9.16%	9.34%	13.88%	13.52%	3.28%	3.08%	5.26%	
65		75%	13.18%	13.84%	20.02%	19.40%	5.14%	6.00%	8.98%	
66		80%	17.98%	19.22%	27.06%	26.44%	7.78%	9.92%	14.34%	
67		85%	24.02%	25.66%	35.98%	35.20%	11.42%	15.64%	22.02%	
68		90%					16.28%	22.50%	31.00%	
71		Estimated Net Average Cost of Insurance								
72		Coverage Election	APH	RA-BP	RA-HP	CRC	GRP	GRIP	hp grip-hpo	NC
74		50%	\$1.86			\$2.15				
75		55%	\$2.23			\$3.10				
76		60%	\$2.33			\$3.18				
77		65%	\$2.83	\$3.20	\$3.38	\$3.78				
78		70%	\$2.93	\$3.64	\$3.48	\$3.75	\$2.04	\$1.88	\$3.35	
79		75%	\$3.51	\$4.75	\$4.32	\$4.44	\$2.06	\$2.01	\$3.50	
80		80%	\$5.52	\$6.82	\$6.26	\$7.14	\$2.76	\$2.78	\$4.94	
81		85%	\$9.75	\$10.61	\$10.14	\$12.99	\$2.58	\$2.57	\$4.69	
82		90%					\$3.06	\$3.30	\$5.54	
85		Average Gross Revenue/Acre								
86		Coverage Election	APH	RA-BP	RA-HP	CRC	GRP	GRIP	hp grip-hpo	GR
88		50%	\$281.37			\$281.07				
89		55%	\$280.99			\$280.12				
90		60%	\$280.89			\$280.05				
91		65%	\$280.39	\$280.02	\$279.84	\$279.44				

	A	B	C	D	E	F	G	H	I	J
92		70%	\$280.29	\$279.58	\$279.74	\$279.47	\$281.18	\$281.34	\$279.88	
93		75%	\$279.72	\$278.48	\$278.90	\$278.78	\$281.17	\$281.21	\$279.72	
94		80%	\$277.70	\$276.40	\$276.97	\$276.08	\$280.46	\$280.44	\$278.28	
95		85%	\$273.47	\$272.61	\$273.08	\$270.23	\$280.65	\$280.65	\$278.53	
96		90%					\$280.17	\$279.93	\$277.68	

97 Average Gross Rev/Acre without insurance **\$283.22**

102 Generate Revenue VARs at

103	Level 1	1%
104	Level 2	5%
105	Level 3	10%
106	Level 4	25%

107 VAR information

108 VAR at 0.01

	Coverage Election	APH	RA-BP	RA-HP	CRC	GRP	GRIP	hp grip-hpo
110	50%	\$145.45			\$148.26			
111	55%	\$150.05			\$152.72			
112	60%	\$154.90			\$161.59			
113	65%	\$162.03	\$166.09	\$169.48	\$169.26			
114	70%	\$173.29	\$176.70	\$178.57	\$178.43	\$142.36	\$142.75	\$142.26
115	75%	\$183.58	\$186.13	\$186.99	\$187.15	\$145.79	\$146.37	\$147.48
116	80%	\$192.08	\$194.47	\$193.98	\$193.31	\$147.28	\$148.76	\$148.30
117	85%	\$197.53	\$200.15	\$196.61	\$194.45	\$148.29	\$150.81	\$149.96
118	90%					\$149.26	\$151.71	\$148.03
119								
120		1% Value at risk without insurance			140.05			

123 VAR at 0.05

	Coverage Election	APH	RA-BP	RA-HP	CRC	GRP	GRIP	hp grip-hpo
124	50%	\$178.77			\$178.86			
125	55%	\$179.52			\$181.08			
126	60%	\$181.72	\$184.08	\$188.61	\$183.70			
127	65%	\$184.26	\$182.72	\$188.34	\$188.03			
128	70%	\$188.03	\$185.46	\$194.40	\$193.99	\$181.28	\$181.52	\$181.12
129	75%	\$191.51	\$192.12	\$200.41	\$200.35	\$181.84	\$183.38	\$181.31
130	80%	\$195.52	\$199.04	\$204.31	\$203.63	\$181.44	\$183.18	\$181.05
131	85%	\$199.71	\$203.86	\$205.16	\$202.76	\$182.77	\$185.10	\$183.62
132	90%					\$183.95	\$185.13	\$185.09
133		5% Value at risk without insurance			180.41			

138 VAR at 0.1

	Coverage Election	APH	RA-BP	RA-HP	CRC	GRP	GRIP	hp grip-hpo
139	50%	\$201.42			\$201.16			
140	55%	\$201.26			\$200.61			
141	60%	\$201.67			\$202.51			
142	65%	\$203.06	\$201.58	\$205.25	\$204.66			
143	70%	\$205.24	\$203.24	\$209.11	\$208.88	\$203.18	\$202.88	\$202.22
144	75%	\$207.95	\$205.59	\$212.48	\$212.38	\$203.31	\$203.77	\$203.67
145	80%	\$208.67	\$206.66	\$213.88	\$213.29	\$203.97	\$204.95	\$203.70
146	85%	\$206.99	\$208.40	\$214.86	\$212.05	\$205.33	\$206.72	\$203.97
147	90%					\$205.48	\$207.96	\$204.53
148		10% Value at risk without insurance			203.33			

153 VAR at 0.25

	Coverage Election	APH	RA-BP	RA-HP	CRC	GRP	GRIP	hp grip-hpo
154	50%	\$241.57			\$241.02			
155	55%	\$240.99			\$240.04			
156	60%	\$240.76			\$239.88			
157	65%	\$240.16	\$239.49	\$239.06	\$238.66			
158	70%	\$239.48	\$238.83	\$239.36	\$238.90	\$241.36	\$242.15	\$240.30
159	75%	\$238.92	\$237.51	\$239.30	\$239.12	\$241.51	\$241.91	\$240.04
160	80%	\$237.68	\$235.46	\$238.80	\$238.13	\$240.47	\$241.04	\$238.83
161	85%	\$234.04	\$232.28	\$236.56	\$233.55	\$240.55	\$241.57	\$238.66
162	90%					\$239.62	\$240.86	\$237.56
163		25% Value at risk without insurance			243.62			

172 VAR Change information

173 VAR Change at 0.01

	Coverage Election	APH	RA-BP	RA-HP	CRC	GRP	GRIP	hp grip-hpo
174	50%	\$5.40			\$8.21			
175	55%	\$10.00			\$12.67			
176	60%	\$14.85	-\$140.05	-\$140.05	\$21.54			
177	65%	\$21.98	\$26.05	\$29.43	\$29.21			
178	70%	\$33.24	\$36.65	\$38.52	\$38.38	\$2.32	\$2.70	\$2.21
179	75%	\$43.54	\$46.08	\$46.94	\$47.11	\$5.74	\$6.32	\$7.43

A	B	C	D	E	F	G	H	I	J
182	80%	\$52.03	\$54.42	\$53.93	\$53.26	\$7.23	\$8.71	\$8.25	
183	85%	\$57.48	\$60.10	\$56.56	\$54.40	\$8.24	\$10.76	\$9.92	
184	90%					\$9.21	\$11.66	\$7.99	
185	1% Value at risk without insurance				140.05				

VAR Change at 0.05

Coverage Election	APH	RA-BP	RA-HP	CRC	GRP	GRIP	hp grip-hpo	
191	50%	-\$1.64			-\$1.55			
192	55%	-\$0.89			\$0.68			
193	60%	\$1.32	\$3.67	\$8.20	\$3.29			
194	65%	\$3.85	\$2.32	\$7.94	\$7.62			
195	70%	\$7.62	\$5.05	\$14.00	\$13.58	\$0.88	\$1.11	
196	75%	\$11.10	\$11.71	\$20.00	\$19.94	\$1.43	\$2.98	
197	80%	\$15.11	\$18.63	\$23.90	\$23.23	\$1.03	\$2.77	
198	85%	\$19.31	\$23.46	\$24.75	\$22.36	\$2.37	\$4.69	
199	90%					\$3.55	\$4.73	
200	5% Value at risk without insurance				180.41			

VAR Change at 0.1

Coverage Election	APH	RA-BP	RA-HP	CRC	GRP	GRIP	hp grip-hpo	
206	50%	-\$1.91			-\$2.17			
207	55%	-\$2.07			-\$2.72			
208	60%	-\$1.66	-\$203.33	-\$203.33	-\$0.82			
209	65%	-\$0.27	-\$1.74	\$1.92	\$1.33			
210	70%	\$1.91	-\$0.09	\$5.78	\$5.55	-\$0.15	-\$0.44	
211	75%	\$4.62	\$2.26	\$9.16	\$9.05	-\$0.02	\$0.44	
212	80%	\$5.34	\$3.33	\$10.56	\$9.96	\$0.64	\$1.62	
213	85%	\$3.66	\$5.08	\$11.53	\$8.72	\$2.00	\$3.39	
214	90%					\$2.15	\$4.63	
215	10% Value at risk without insurance				203.33			

VAR Change at 0.25

Coverage Election	APH	RA-BP	RA-HP	CRC	GRP	GRIP	hp grip-hpo	
221	50%	-\$2.05			-\$2.60			
222	55%	-\$2.63			-\$3.58			
223	60%	-\$2.86	-\$243.62	-\$243.62	-\$3.74			
224	65%	-\$3.46	-\$4.13	-\$4.56	-\$4.96			
225	70%	-\$4.14	-\$4.79	-\$4.26	-\$4.72	-\$2.26	-\$1.47	
226	75%	-\$4.70	-\$6.11	-\$4.32	-\$4.50	-\$2.12	-\$1.71	
227	80%	-\$5.94	-\$8.16	-\$4.82	-\$5.49	-\$3.15	-\$2.58	
228	85%	-\$9.58	-\$11.34	-\$7.06	-\$10.07	-\$3.07	-\$2.05	
229	90%					-\$4.00	-\$2.77	
230	25% Value at risk without insurance				243.62			

Enter Gross Target (\$/Acre)

\$325.00

Probability of not Reaching Target

Coverage Election	APH	RA-BP	RA-HP	CRC	GRP	GRIP	hp grip-hpo	
242	50%	77.7%			77.9%			
243	55%	78.0%			78.5%			
244	60%	78.1%	76.4%	76.4%	79.0%			
245	65%	78.8%	79.0%	79.6%	79.9%			
246	70%	79.5%	79.7%	80.4%	80.6%	77.9%	77.7%	
247	75%	80.1%	80.8%	81.7%	81.9%	78.3%	78.1%	
248	80%	81.9%	82.4%	83.0%	83.3%	78.8%	79.0%	
249	85%	84.2%	84.6%	85.4%	86.2%	78.8%	78.9%	
250	90%					79.3%	79.7%	
251	Probability with no insurance				76.4%			

Probability of Reaching Target

Coverage Election	APH	RA-BP	RA-HP	CRC	GRP	GRIP	hp grip-hpo	
255	50%	22.3%			22.1%			
256	55%	22.0%			21.5%			
257	60%	21.9%	23.6%	23.6%	21.0%			
258	65%	21.2%	21.0%	20.4%	20.1%			
259	70%	20.5%	20.3%	19.6%	19.4%	22.1%	22.3%	
260	75%	19.9%	19.2%	18.3%	18.1%	21.7%	21.9%	
261	80%	18.1%	17.6%	17.0%	16.7%	21.2%	21.0%	
262	85%	15.8%	15.4%	14.6%	13.8%	21.2%	21.1%	
263	90%					20.7%	20.3%	
264	Probability with no insurance				23.6%			

Return
Defaults

Per Acre Insurance Payments By Year, Corn
Logan County, Illinois

Year	APH 75%	APH 85%	RA-BP 75%	RA-BP 85%	RA-HP 75%	RA-HP 85%	CRC 85%	GRP 90%	GRIP-BP 90%	GRIP-HP 90%	GRIP-HP 85%
1972											
1973											
1974								50.70		69.76	12.80
1975											
1976											
1977									44.44	44.44	
1978											
1979											
1980		38.50				53.91	53.91	249.94	190.37	343.88	303.05
1981				43.66		43.66	43.66		146.04	146.04	93.57
1982				10.43		10.43	10.43		97.10	97.10	41.75
1983								147.52	26.10	202.97	153.85
1984											
1985											
1986											
1987											
1988	168.00	227.50	154.30	223.72	220.99	299.30	299.30	328.02	310.71	451.30	416.79
1989									35.55	35.55	
1990											
1991											
1992									19.52	19.52	
1993											
1994											
1995								102.44		140.94	88.17
1996											
1997	10.50	70.00	9.45	78.87	13.29	83.23	83.23	9.13	1.29	12.56	
1998									197.65	197.65	148.22
1999									115.95	115.95	61.72
2000									65.39	65.39	8.18
2001											
2002											
2003											
2004									160.37	160.37	108.75
2005		24.50	1.82	71.24	1.81	71.24	71.24	44.03	245.39	245.39	198.76
Avg Payment	5.25	10.60	4.87	12.59	6.94	16.52	16.52	27.41	48.70	69.08	48.11
Premium	6.22	14.22	11.26	31.85	16.84	45.36	32.70	11.47	35.26	43.46	28.90
Net Position	-0.97	-3.62	-6.39	-19.26	-9.90	-28.84	-16.18	15.94	13.44	25.62	19.21

Insurance payments are adjusted to 2006 conditions. Because of these adjustments, the above simulated payments will not exactly match historical payments.

2007 Ifarm Premium Calculator



Input (enter the following information for premium calculation)

Name	2007 rates
Date	2/9/2007
State	Illinois
County	Sangamon
Crop	Corn
Practice	non-irrigated
APH yield	160
Protection level	100 % of max for GRP and GRIP contracts
Risk class	Not high risk
Options	None

Parameters

APH Indemnity Price	\$3.50
CRC Base Price	\$4.06
RA Base Price	\$4.06
GRIP Base Price	\$4.06
RA volatility	0.260
CRC low price factor	0.651
CRC high price factor	0.651
GRIP volatility	0.250
Last updated	3/1/2007

Contact

Name: _____
 Phone: _____
 Address: _____

Per Acre Premiums

Coverage level	BASIC UNITS				OPTIONAL UNITS				APH Yield Guarantee	Minimum Revenue Guarantee	Cost per APH Bu. CRC
	APH	RA-BP	RA-HP	CRC	APH	RA-BP	RA-HP	CRC			
50	\$1.09			\$2.36	\$1.21			\$2.62	80	\$325	\$0.01
55	1.70			3.60	1.89			4.00	88	\$357	\$0.02
60	2.33			4.87	2.59			5.41	96	\$390	\$0.03
65	3.51	\$4.14	\$6.74	7.33	3.90	\$4.55	\$7.41	8.14	104	\$422	\$0.05
70	4.76	7.04	10.84	9.98	5.29	7.74	11.92	11.09	112	\$455	\$0.06
75	6.93	11.93	17.69	14.68	7.69	13.12	19.46	16.31	120	\$487	\$0.09
80	10.39	19.93	28.81	22.44	11.54	21.92	31.69	24.93	128	\$520	\$0.14
85	15.80	32.91	46.66	35.06	17.55	36.20	51.33	38.95	136	\$552	\$0.22

No. of acres	1000	No of sections	4
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Coverage level	ENTERPRISE UNITS						Cost per APH Bu. CRC
	RA-BP	RA-HP	CRC	GRP	GRIP-BP	GRIP-HP	
50			\$1.79				\$0.01
55			\$2.74				\$0.02
60			\$3.70				\$0.02
65	\$3.53	\$5.99	\$5.57				\$0.03
70	6.21	9.76	\$7.58	\$1.73	\$3.38	\$4.88	\$0.05
75	10.53	15.82	\$11.16	1.98	5.64	7.99	\$0.07
80	17.53	25.55	\$17.05	3.50	11.90	15.49	\$0.11
85	28.65	40.85	\$26.65	4.96	19.38	23.89	\$0.17
90				8.96	32.41	39.23	

GRP max prot. level:	\$775
GRIP max prot. level:	\$1,067
Expected yield:	175.2

Insurance premium are given for educational purposes. Actual rates must be obtained from a crop insurance agent.

GRAIN DELIVERY MODEL

(Version 2.1)



Grain for Delivery

Wet bushels for delivery:	1,000	
Delivery moisture level:	16.0%	
Interest rate:	8%	Yr:
Month of delivery:	Sep	2006
Current cash price:	\$6.65	

Input for Alternative Delivery Points			
Name of delivery point	Elevator 1	Elevator 1	Elevator 2
Month of grain sale (End of mo.)	On Delivery	Jan	Jan
Sales price (\$/bu.)	\$6.65	\$6.80	\$6.80
Moisture/shrink factors			
Shrink factor:	1.4	1.4	1.0
Handling shrink:	0.0%	0.0%	0.0%
Cash sale moisture level:	13.0%	13.0%	13.0%
Storage moisture level:	13.0%	13.0%	13.0%
Pay drying to storage moist?:	Inputs Do Not Apply	Yes	Yes
Transportation costs			
Cost per wet bu:	\$0.06	\$0.06	\$0.06
Drying costs			
Based on wet or dry bu.	Wet	Wet	Wet
Charges vary by moisture level:	Yes	Yes	No
Drying charges (\$ per point):	Schedule	Schedule	\$0.000
Storage costs			
Drop charges (\$/bu.):	Inputs Do Not	\$0.06	\$0.15
Monthly storage charge begins in:		Sep	Jan
Monthly storage costs (\$/bu.):		\$0.0200	\$0.0250
Report on Revenue from Delivery Alternatives			
	Elevator 1	Elevator 1	Elevator 2
Wet bushels delivered	1,000.0	1,000.0	1,000.0
Dry bushels sold	958.0	958.0	970.0
Revenue from sales	\$6,370.70	\$6,514.40	\$6,596.00
Projected costs			
Transportation	\$60.00	\$60.00	\$60.00
Drying	40.00	120.00	0.00
Storage	0.00	153.28	169.75
Interest	0.00	212.36	215.02
Total costs	\$100.00	\$545.64	\$444.77
Net revenue	\$6,270.70	\$5,968.76	\$6,151.23
Net revenue per wet bu.	\$6.27	\$5.97	\$6.15
Net revenue per dry bu.	\$6.55	\$6.23	\$6.34
Price to break-even with a \$6.65 sale at delivery:	NA	\$7.03-Jan	\$7.05-Jan
Break-Even Prices by Month			
	<u>Elevator 1</u>	<u>Elevator 1</u>	<u>Elevator 2</u>
September-06	NA	\$6.77	\$6.84
October-06	NA	\$6.84	\$6.89
November-06	NA	\$6.90	\$6.93
December-06	NA	\$6.97	\$6.98
January-07	NA	\$7.03	\$7.05
February-07	NA	\$7.10	\$7.12
March-07	NA	\$7.16	\$7.19
April-07	NA	\$7.22	\$7.25
May-07	NA	\$7.29	\$7.32
June-07	NA	\$7.35	\$7.39
July-07	NA	\$7.42	\$7.46
August-07	NA	\$7.48	\$7.53



Crop Storage Analysis Projected Price Module INPUT

Date 1/1/2007
Crop corn
Default basis \$0.25

Enter futures prices for the following
Chicago Board of Trade futures contracts:

Contract month	Futures Price	Basis
Mar-07	\$4.03	\$0.25
May-07	\$4.15	\$0.25
Jul-07	\$4.22	\$0.25
Sep-07	\$4.04	\$0.25
Dec-07	\$3.94	\$0.25

Enter put option premium for the following
Chicago Board of Trade put option contracts:

Contract month	Strike Price	Put Premium
Mar-07	\$4.00	\$0.09
May-07	\$4.10	\$0.20
Jul-07	\$4.20	\$0.31
Sep-07	\$4.00	\$0.38
Dec-07	\$3.90	\$0.40

PROJECTED AND BREAKEVEN PRICES

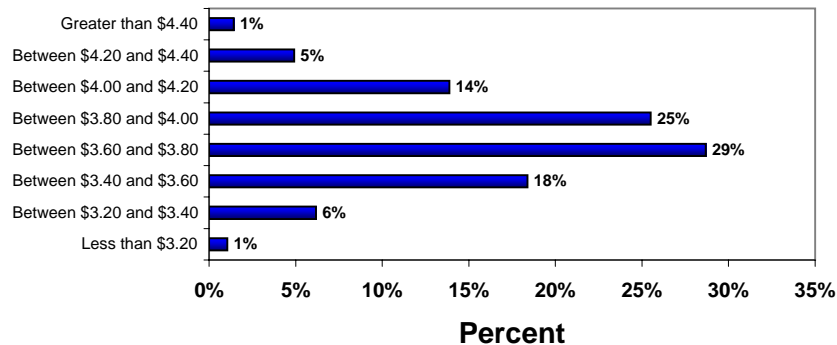
Month	Expected Price	Breakeven Price	Expected Profit *	Percent Time Price Will Be Below Breakeven Price
Mar-07	\$3.78	\$3.03	\$0.75	0%
May-07	\$3.90	\$3.11	\$0.79	8%
Jul-07	\$3.97	\$3.18	\$0.79	17%
Sep-07	\$3.79	\$3.25	\$0.54	34%
Dec-07	\$3.69	\$3.36	\$0.33	43%

* Expected profit equals expected price minus breakeven price (per bu.).

POSSIBLE PRICES AND PROFITS BY MONTH

Month to graph prices Mar-07

Percent Time Cash Price is:



Percent time price will be between:	
Price 1	\$0.01
Price 2	\$2.10
Percent	0%

Percent of Time	Price will be below:	Profit will be below:
25%	\$ 3.60	\$0.57
50%	\$ 3.77	\$0.74
75%	\$ 3.96	\$0.93



Corn-Soybean Rotation Tool

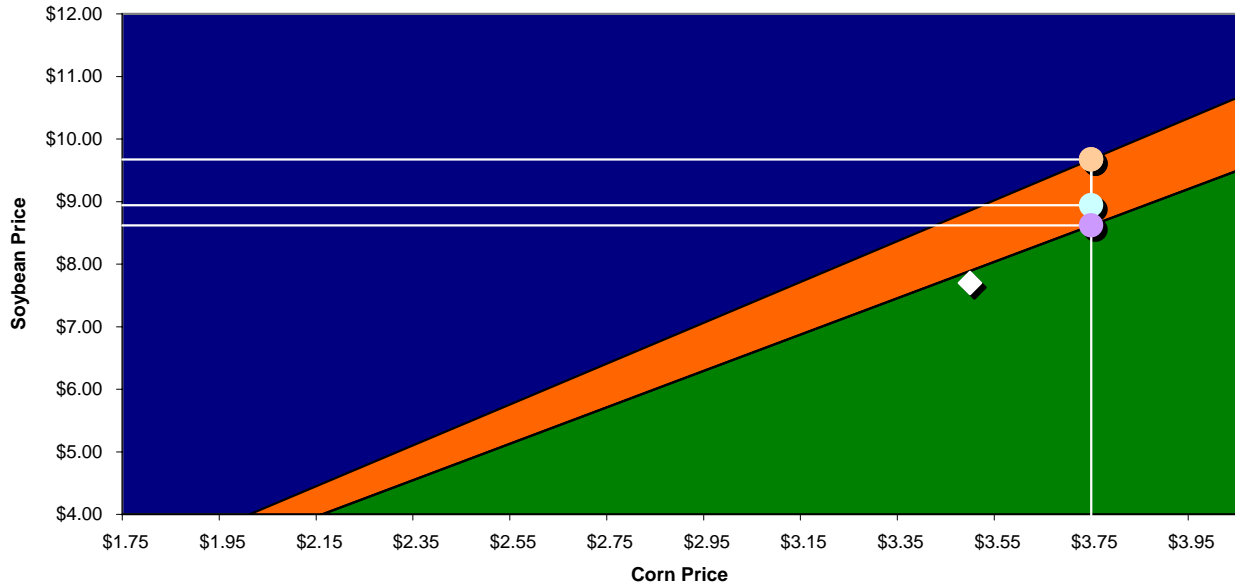
Budget Input					Rotation Returns	
	Corn-After-Soybeans	Corn-After-Corn	Soybeans-After-Corn	Soybeans-After-Two-Years-Corn	Rotation	Return
Default = Central Ill. -- High						
Average yields (bu. per acre)	180	170	53	55	1/2 corn	
Market price (per bu.)	\$3.50	\$ 3.50	\$7.70	\$ 7.70	- 1/2 soybeans	\$301
Government payments	28	28	28	28	2/3 corn	
Revenue per acre	\$ 658	\$ 623	\$ 436	\$ 452	- 1/3 soybeans	\$311
Direct Costs	\$ per acre				Continuous corn \$314	
Fertilizer and lime	\$ 73	\$ 83	\$ 27	\$ 27	Interpretation: Shows returns after a stable rotation has been reached. 1/2 corn-1/2 soybeans rotation is the average of returns from corn-after-soybeans and soybeans-after-corn, 2/3 corn-1/3 soybeans is average of corn-after-soybeans, corn-after-corn, and soybeans-after-two-years-corn, and continuous corn equals corn-after-corn returns.	
Pesticides	43	45	32	32		
Seed	46	46	32	32		
Drying and storage	18	16	5	5		
Crop insurance	8	8	6	6		
Total Direct Costs	\$ 188	\$ 198	\$ 102	\$ 102		
Power Costs						
Machine hire/lease	\$ 7	\$ 8	\$ 5	\$ 5		
Utilities	4	4	3	3		
Machine repair	13	14	12	12		
Fuel and Oil	16	17	13	13		
Light Vehicle	1	2	1	1		
Machinery depreciation	21	22	20	20		
Total Power Costs	\$ 62	\$ 67	\$ 54	\$ 54		
Overhead Costs						
Hired labor	\$ 9	\$ 9	\$ 9	\$ 9		
Building repair and rent	4	4	4	4		
Building depreciation	3	3	3	3		
Insurance	7	7	7	7		
Misc.	6	6	6	6		
Interest (non-land)	15	15	13	13		
Total overhead costs	\$ 44	\$ 44	\$ 42	\$ 42		
Total non-land costs	\$ 294	\$ 309	\$ 198	\$ 198		
Return to land and operator	\$ 364	\$ 314	\$ 238	\$ 254	Break-even corn-after-corn yield 166 Percent below corn-after-soybeans yield 8% Shows corn-after-corn yield for continuous corn to have the same return as 1/2 corn - 1/2 soybeans rotation.	

This tool is useful for computing returns from differing corn-soybean rotations. Any

number in blue can be changed. Clicking on the default button brings in budgets for northern, central, and southern Illinois. Defaults are based on Illinois FBFM records. Corn-after-corn and soybeans-after-two-years-corn yields are based on expert opinion.

Prepared by: Gary Schnitkey and Dale Lattz, University of Illinois, October 2006.

Rotations With Highest Returns



- Continuous Corn
- 2/3 Corn - 1/3 Soybean Rotation
- 1/2 Corn - 1/2 Soybean Rotation (or higher percentage of soybeans)

Plot Point (white diamond)		Rotation Returns (white)	
Corn Price	\$3.50	50-50	\$ 301.2
Soybean Price	\$7.70	2/3-1/3	\$ 310.7
		100% corn	\$ 314.2

Prices for Equivalent Returns

Corn Price	1/2 1/2 Rotation = 2/3 1/3 Rotation Soybean Price	1/2 1/2 Rotation = Continuous Corn Soybean Price	2/3 1/3 Rotation Continuous Corn Soybean Price
\$ 1.75	\$ 3.14	\$ 2.91	\$ 2.80
2.25	4.78	4.42	4.25
2.75	6.41	5.92	5.71
3.25	8.04	7.43	7.16
3.75	9.67	8.94	8.62
4.25	11.31	10.45	10.07
User Defined			
\$3.75	9.67	8.94	8.62



Sensitivity Report

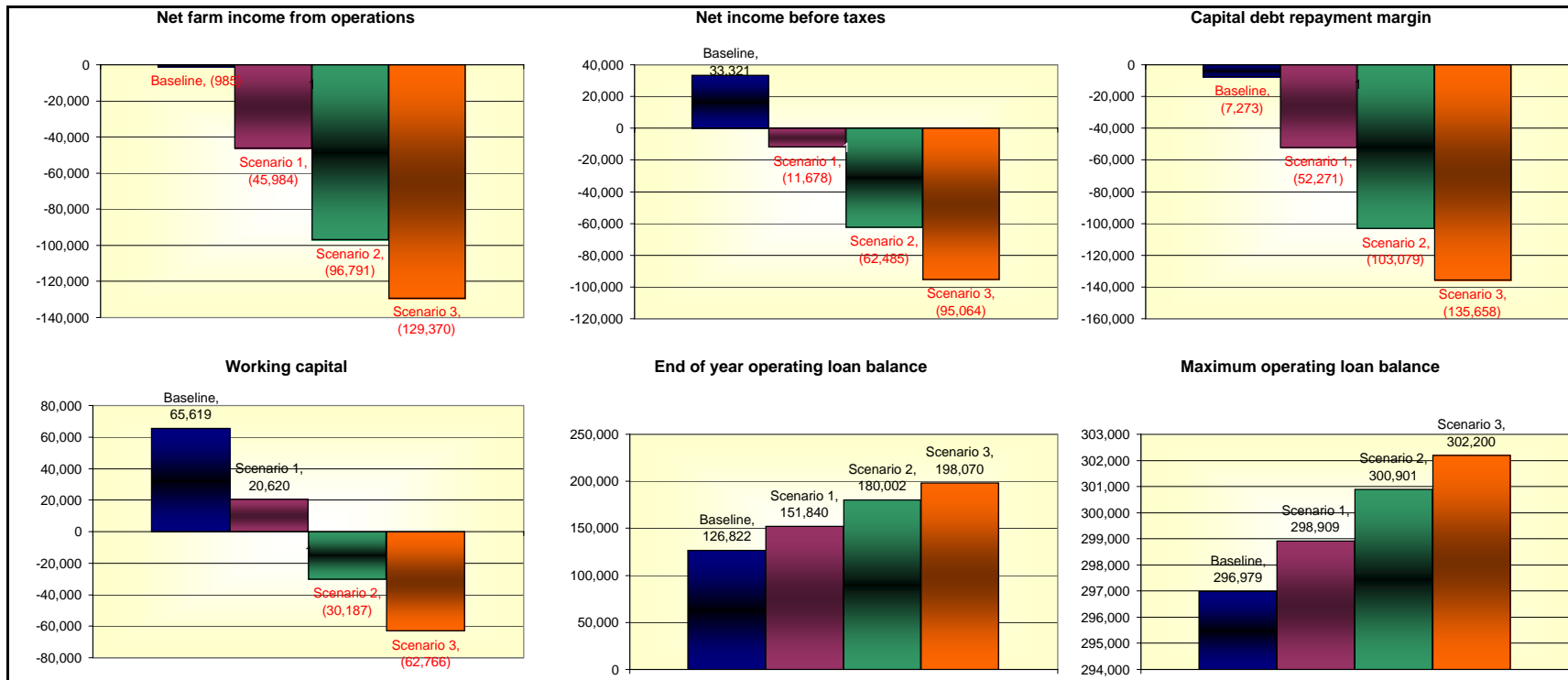
Corn
Soybeans

	Baseline		Sensitivity Analysis 1 Scenario 1		Sensitivity Analysis 2 Scenario 2		Sensitivity Analysis 3 Scenario 3	
	Yields	Price	Yields	Price	Yields	Price	Yields	Price
Corn	166	\$ 2.15	148	\$2.15	128	\$2.15	115	\$2.15
Soybeans	50	\$ 5.85	45	\$5.85	40	\$5.85	36	\$5.85

	Baseline	Scenario 1	Scenario 2	Scenario 3
Net farm income from operations	-985	-45,984	-96,791	-129,370
Net income before taxes	33,321	-11,678	-62,485	-95,064
Farm earnings before interest, taxes & depreciation	73,311	28,565	-21,960	-54,357
Total earnings before interest, taxes & depreciation	107,617	62,871	12,346	-20,051
Capital debt repayment capacity	16,955	-28,044	-78,851	-111,430
Capital debt repayment margin	-7,273	-52,271	-103,079	-135,658
Term debt coverage	0.823	-0.272	-1.509	-2.302
Working capital	65,619	20,620	-30,187	-62,766
End of year operating loan balance	126,822	151,840	180,002	198,070
Maximum operating loan balance	296,979	298,909	300,901	302,200

Performance comparisons

	Baseline	Scenario 1	Scenario 2	Scenario 3
Net farm income from operations	-985	-45,984	-96,791	-129,370
Net income before taxes	33,321	-11,678	-62,485	-95,064
Farm earnings before interest, taxes & depreciation	73,311	28,565	-21,960	-54,357
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Maximum operating loan balance	296,979	298,909	300,901	302,200



BALANCE SHEET

for
John and Sally Smith

As of : December 31, 2006

Preparation date: April 11, 2007

ASSETS	2005	2006	LIABILITIES AND OWNER EQUITY	2005	2006
CURRENT ASSETS			CURRENT LIABILITIES		
Cash	17,200	2,500	Accounts payable (Sch. 6)	22,000	15,200
Savings and short-term time deposits	6,000	6,000	Notes payable within one year (Sch. 7)	51,999	71,640
Marketable securities (at market)	0	-	Current portion of all term debt (Sch. 7)	14,978	24,585
Accounts receivable	200	-	Accrued interest (Sch. 7)	4,738	5,708
Inventories: (Sch. 1)			Accrued expenses:	-	-
Livestock	0	-	Income and social security taxes	15,606	17,266
Crops	114,000	172,200	Accrued rents	-	-
Feed	0	-	Other accrued items	1,190	1,250
Supplies and other	1,106	1,126	Current portion-deferred taxes	-	-
Cash investment in growing crops	0	-	Other current liabilities - farm	-	-
Prepaid expenses (Sch. 2)	14,000	15,500	Other current liabilities - personal	-	-
Other current assets - farm	30,500	30,500			
Other current assets - personal	0	-			
TOTAL CURRENT ASSETS	183,006	227,826	TOTAL CURRENT LIABILITIES	110,511	135,649
NONCURRENT ASSETS			NONCURRENT LIABILITIES		
Breeding livestock (at market) (Sch. 3)	0	-	Noncurrent portion of term farm debt (Sch. 7) :		
Machinery and equipment (at market) (Sch. 4)	412,998	496,138	Nonreal estate farm debt:		
Investments in capital leased assets	0	-	Notes with original maturity less than or equal to 10 years	58,037	98,667
Investments in cooperatives	0	-	Notes with original maturity greater than 10 years	-	-
Investments in other entities	0	-	Farm real estate debt:		
Retirement accounts	12,000	12,000	Notes with original maturity less than or equal to 10 years	-	-
Cash value life insurance	0	-	Notes with original maturity greater than 10 years	108,775	105,915
Long-term financial assets and nonmarketable securities	0	-	Noncurrent portion-deferred taxes	-	-
Farm real estate (at market) (Sch. 5):			Other noncurrent liabilities-farm	-	-
Land	1,054,000	1,102,000	Other noncurrent liabilities-personal	-	-
Buildings and improvements	58,700	54,654			
Other noncurrent assets-farm (at market)	0	-	TOTAL NONCURRENT LIABILITIES	166,812	204,582
Other noncurrent assets-personal (at market)	0	-			
TOTAL NONCURRENT ASSETS	1,537,698	1,664,792	TOTAL LIABILITIES	277,323	340,231
			OWNER EQUITY		
			Reconciliation errors		
			Contributed capital and retained earnings	960,758	980,675
			Valuation/personal asset equity	482,623	571,712
			TOTAL OWNER EQUITY	1,443,381	1,552,387
TOTAL ASSETS	1,720,704	1,892,618	TOTAL LIABILITIES and OWNER EQUITY	1,720,704	1,892,618

Cost values

Breeding livestock	0	-
Machinery and equipment	355,840	395,845
Real estate - land	646,000	646,000
Real estate - buildings & improvements	41,235	39,235
Other noncurrent assets - personal	0	-

INCOME STATEMENT

for

John and Sally Smith

For 12 month period ending : December 31, 2006

Item	Subtotal	Total
FARM REVENUE		
Crops and feed:		
Cash receipts	\$455,547	
Inventory adjustments	58,200	
Livestock and poultry:		
Cash receipts	0	
Inventory adjustments	0	
Cash sales of other livestock products	0	
Change in value due to raised breeding stock	0	
Gain/loss culled breeding stock sales	0	
Gov't payments and other farm income	32,515	
Change in accounts receivable	(200)	
	<u>Gross revenue</u>	
	\$546,062	
Less:		
Cost of purchased feed/grain & livestock	- 0	
Value of farm production	\$546,062	\$546,062
FARM EXPENSES		
Farm Operating Expenses:		
Cash operating expenses	+ \$425,690	
Noncash adjustments to expenses:		
Change in accounts payable	+ (6,800)	
Change in prepaid expenses	- 1,500	
Change in unused supplies	- 21	
Change in cash in growing crops	- 0	
Change in other accrued items	+ 60	
Depreciation	+ 45,135	
Total farm operating expenses	\$462,565	
Interest Expense on Farm Loans:		
Amount of interest paid in cash	\$17,525	
Change in accrued interest	970	
Total interest expense	\$18,495	
Total farm expenses	\$481,059	- 0
Net income from operations	\$65,003	\$65,003
Gains/losses on sales of farm capital assets	0	0
Net farm income before taxes	\$65,003	\$65,003
NONFARM ADJUSTMENTS		
Wages	-	
Interest and dividend income	0	
Other nonfarm income net of expenses	31,000	
Gains/losses on sales of nonfarm assets	0	
Total nonfarm income	\$31,000	+ \$31,000
Income before taxes and extraordinary items	\$96,003	\$96,003
INCOME and SOCIAL SECURITY TAXES		
Amount of tax paid in cash	\$12,606	
Change in income and social security tax accruals	1,660	
Change in current portion of deferred taxes	0	
Total income and social security tax expense	\$14,266	- \$14,266
Income before extraordinary items	\$81,737	\$81,737
Extraordinary items (after tax)	\$0	\$0
Net income	\$81,737	\$81,737

STATEMENT OF CASH FLOWS

for

John and Sally Smith

For 12 month period ending : December 31, 2006

Item	Subtotal	Total
CASH FLOWS FROM OPERATING ACTIVITIES		
<i>Inflows</i>		
Cash received from farm production and govt. payments	\$488,062	
Cash received from net nonfarm income	31,000	
Total cash inflows from operating activities		\$519,062
<i>Outflows</i>		
Cash paid for operating expenses	\$425,690	
Cash paid for operating and s.t. loan interest	5,325	
Cash paid for term loan interest	12,200	
Cash paid for feed and market livestock	0	
Cash paid for other items purchased for resale	0	
Cash paid for income and social security taxes	12,606	
Cash withdrawals for family living	61,819	
Total cash outflows from operating activities		- \$517,640
Net cash flows provided by operating activities		\$1,422
CASH FLOWS FROM INVESTING ACTIVITIES		
<i>Inflows</i>		
Cash received on sale of machinery, equipment, and real estate	\$0	
Cash received from sale of breeding livestock	0	
Cash received from withdrawals of savings	0	
Cash received from sale of personal assets and retirement accts.	0	
Total cash inflows from investing activities		\$0
<i>Outflows</i>		
Cash paid to purchase machinery, equipment, and real estate	\$83,140	
Cash paid for purchase of breeding livestock	0	
Cash paid for deposits to savings accounts	0	
Cash paid to purchase marketable securities	0	
Cash paid to purchase personal assets and retirement accts.	0	
Total cash outflows from investing activities		- \$83,140
Net cash flows provided by investing activities		(\$83,140)
CASH FLOWS FROM FINANCING ACTIVITIES		
<i>Inflows</i>		
Proceeds from operating loans and short-term notes	\$19,641	
Proceeds from term debt financing	62,355	
Cash received from capital contributions	0	
Total cash inflows from financing activities		\$81,996
<i>Outflows</i>		
Cash repayment of operating and short-term loans	0	
Cash repayment of term debt-scheduled	14,978	
Cash repayment of term debt-unscheduled	0	
Cash repayment of capital leases	0	
Cash payments of dividends and other capital distributions	0	
Total cash outflows from financing activities		- \$14,978
Net cash flows provided by financing activities		\$67,018
Net increase (decrease) in cash flows		(\$14,700)
Beginning of year cash balance		\$17,200
End of year cash balance		\$2,500

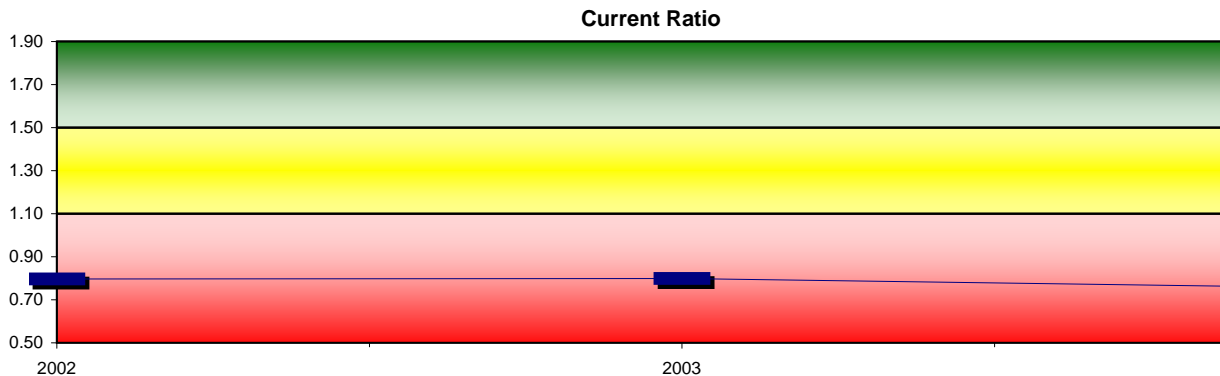
STATEMENT OF OWNER EQUITY

for
John and Sally Smith
For 12 month period ending : December 31, 2006

Item	Subtotal	Total
Beginning of period owner equity	\$1,443,381	\$1,443,381
Changes in contributed capital and retained earnings:		
Net Income	\$81,737	
Withdrawals for family living	- 61,819	
Capital Contributions:		
Debt forgiveness	+ _____	
Gifts	+ _____	
Inheritances	+ _____	
Capital Distributions:		
Dividends	- _____	
Gifts	- _____	
Inheritances	- _____	
Total change in contributed capital and retained earnings	\$19,918	\$19,918
Change in valuation (market value over cost/basis) of:		
Marketable securities	_____ 0	
Machinery and equipment	_____ 43,135	
Farm real estate	_____ 48,000	
Buildings	_____ (2,046)	
Other farm capital assets	_____ 0	
Personal assets	_____ 0	
Personal liabilities	- _____ 0	
Total change in valuation	\$89,089	\$89,089
Change in noncurrent portion of deferred taxes	- 0	- \$0
Total change in valuation equity		\$89,089
Reconciliation error		0
End of period owner equity		<u>1,552,387</u>

Trend Analysis

- 2002
- 2003
- 2004



	2002	2003	2004	High Performance Benchmark	Health Index	Trend Index	Include in Ratio Report
Mark and Mary Prior Liquidity							
Current Ratio	0.796	0.799	0.758	1.500	1.1	3.5	
Working Capital to VFP (gross revenue)	(0.10)	(0.08)	(0.12)	0.50	1.1	3.5	
Working Capital	\$ (21,831)	\$ (23,688)	\$ (32,163)	\$127,913	1.1	NA	
Solvency							
Debt to Asset Ratio	0.542	0.402	0.361	0.24	5.5	8.3	
Equity to Asset Ratio	0.458	0.598	0.639	0.76	5.5	8.3	
Debt to Equity Ratio	1.181	0.673	0.566	0.32	5.5	8.3	
Profitability							
Rate of Return on Farm Assets	-3.26%	2.04%	3.34%	5.00%	5.2	9.5	
Rate of Return on Farm Equity	-14.01%	-1.84%	1.14%	10.00%	3.0	9.4	
Earned Net Worth Trend	-8.89%	4.47%	4.19%	10.00%	NA	NA	
Operating Profit Margin Ratio	-11.62%	6.37%	12.10%	30.00%	4.3	9.4	
Net Farm Income from Operations	\$ (14,001)	\$ 31,130	\$ 48,723	\$63,957	5.4	NA	
Repayment Capacity							
Term Debt and Capital Debt Margin	\$ (12,633)	\$ 35,975	\$ 27,300	\$31,827	6.2	NA	
Interest Coverage	-0.987	0.671	1.267	NA	NA	NA	
Term Debt & Capital Lease Coverage Ratio	0.702	1.848	1.643	1.750	6.2	9.1	
Financial Efficiency							
Asset Turnover	0.280	0.320	0.276	0.499	4.4	4.0	
Operating Expense Ratio	0.762	0.656	0.619	0.541	5.1	9.2	
Depreciation/Amortization Expense Ratio	0.183	0.138	0.102	0.076	6.6	8.8	
Interest Expense Ratio	0.118	0.095	0.096	0.100	6.8	7.0	
Net Farm Income from Operations Ratio	-0.063	0.111	0.184	0.276	5.4	9.4	
Machinery Value Per Acre	\$ 265.19	\$ 263.74	\$ 264.44	\$199.2	4.8	4.0	
Interest Expense and Cash Rent Ratio	0.118	0.095	0.096	NA	8.5	6.0	
Financial Measures							
FICO Score	700	720	720	700.0	6.4	7.0	
Assets	\$ 790,177	\$ 917,958	\$ 996,876	NA	NA		
Equity	\$ 362,257	\$ 548,596	\$ 636,604	NA	NA		
Value of Farm Production	\$ 222,290	\$ 280,835	\$ 264,354	NA	NA		
Financial Structure							
Current Assets/Total Assets	0.108	0.103	0.101	NA	NA		
Current Liabilities/Total Liabilities	0.251	0.319	0.369	NA	NA		



For Year Ending: 2006

Run Date: 11-Apr-07

Quarterly Cash Flow

	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total 2006	Total 2005	Change \$	Change %
CASH AVAILABLE:								
Beginning cash balance	\$ 2,500	\$ 2,000	\$ 2,000	\$ 2,000				
Crop receipts	117,110	22,320	18,445	225,183	383,058	385,547	(2,489)	1%
Market livestock and products receipts	-	-	-	-	-	-	0	0%
Government program payments	-	-	22,936	27,212	50,148	51,515	(1,367)	3%
Other farm production receipts	901	901	901	901	3,605	3,500	105	-3%
Crop insurance payments	-	-	-	-	-	7,500	(7,500)	0%
Non-farm, interest and dividend income	8,577	8,577	8,577	8,577	34,306	31,200	3,106	-9%
Term debt financing	-	-	-	-	-	62,355	(62,355)	0%
Sales of machinery, equipment and RE	-	-	-	-	-	-	0	0%
Sales of breeding livestock	-	-	-	-	-	-	0	0%
Other	-	-	-	-	-	-	0	0%
TOTAL CASH AVAILABLE	\$ 129,088	\$ 33,798	\$ 52,859	\$ 263,873	\$ 471,117			
CASH REQUIRED:								
Operating Expenses:								
Labor	\$ 4,500	\$ 4,500	\$ 4,500	\$ 4,500	\$ 18,000	\$ 14,875	3,125	-17%
Herbicides	22,808	22,808	-	-	45,615	45,560	55	0%
Insecticides	-	-	-	-	-	-	0	0%
Fertilizer	35,843	-	-	35,843	71,685	65,960	5,725	-8%
Seed	24,510	24,510	-	-	49,020	46,240	2,780	-6%
Machine Hire / Lease	-	6,309	-	6,309	12,618	12,250	368	-3%
Drying	3,758	-	-	3,758	7,515	7,480	35	0%
Storage	-	-	-	6,135	6,135	6,120	15	0%
Machine repair	7,068	7,068	7,068	7,068	28,274	26,250	2,024	-7%
Crop insurance	9,530	-	-	-	9,530	9,520	10	0%
Irrigation	-	-	-	-	-	-	0	0%
Land rent	51,300	-	51,300	-	102,600	95,950	6,650	-6%
Fuel and oil	6,351	6,351	6,351	6,351	25,405	23,625	1,780	-7%
Light vehicle	875	875	875	875	3,500	3,500	0	0%
Marketing & transportation expenses	-	-	-	-	-	-	0	0%
Utilities	1,803	1,803	1,803	1,803	7,210	7,000	210	-3%
Land improvements	-	-	-	-	-	-	0	0%
Soil and water conservation	-	-	-	-	-	-	0	0%
Building repair	773	773	773	773	3,090	3,000	90	-3%
Other insurance	2,625	2,625	2,625	2,625	10,500	10,500	0	0%
Real estate and property taxes	3,790	-	3,790	-	7,581	7,360	221	-3%
Building rent	-	-	-	-	-	-	0	0%
Livestock expenses	-	-	-	-	-	-	0	0%
Veterinary and medicine	-	-	-	-	-	-	0	0%
Misc. crop and other farm expenses	2,704	2,704	2,704	2,704	10,815	10,500	315	-3%
Total Cash Operating Expenses	\$ 178,236	\$ 80,325	\$ 81,789	\$ 78,742	\$ 419,092	\$ 395,690	\$ 23,402	-6%
Livestock and Feed Purchases:								
Feed purchases	-	-	-	-	-	-	0	0%
Livestock purchases	-	-	-	-	-	-	0	0%
Capital Expenditures:								
Machinery, equip. and building purchases	-	-	-	-	-	83,140	(83,140)	0%
Land purchases	-	-	-	-	-	-	0	0%
Financing Expenditures:								
Interest payments on short-term loans	4,454	2,663	-	-	7,117	5,326	1,791	-25%
Principal payments on old operating loan	71,640	-	-	-	71,640	-	71,640	-100%
Interest payments on term loans	8,431	-	8,431	-	16,862	12,200	4,662	-28%
Principal payments on term loans	12,114	-	12,114	-	24,228	14,978	9,250	-38%
Other Expenditures:								
Family living expenditures	12,974	12,974	12,974	12,974	51,895	51,895	0	0%
Nonfarm business expenses	-	-	-	-	-	-	0	0%
Deposits to futures accounts	-	-	-	-	-	-	0	0%
Investments and other	-	-	-	-	-	-	0	0%
Income and social security taxes	12,606	-	-	-	12,606	12,606	0	0%
TOTAL CASH REQUIRED	300,455	95,961	115,307	91,716	603,439			
NET CASH POSITION	(171,367)	(62,164)	(62,448)	172,157	(132,322)			
New borrowings and savings withdrawals:								
Borrowed from operating loan	173,367	64,164	64,448	-	299,979	-		
Withdrawals from savings	5,000	-	-	-	5,000	-		
Repayment of operating loan and savings deposits:								
Payments on operating loan	-	-	-	170,157	170,157	-		
Additions to savings	-	-	-	-	-	-		
End of quarter balances:								
Cash	2,000	2,000	2,000	2,000	2,000			
Savings	1,000	1,000	1,000	1,000	1,004			
Operating loans (\$71,640. beg balance)	168,367	232,531	296,979	126,822				
Accrued interest on operating loan	2,250	3,758	4,964	3,973				
Interest earned on savings account	4	4	4	4	15			



FARM EARNINGS BEFORE INTEREST, TAXES & DEPRECIATION (FARM EBITDA)	\$	73,311
PLUS: Net Nonfarm income		34,306
TOTAL EARNINGS BEFORE INTEREST, TAXES & DEPRECIATION (EBITDA)	\$	107,617
LESS: Interest expense		26,161
LESS: Income and Social Security taxes		12,606
LESS: Family living withdrawals		51,895
CAPITAL REPLACEMENT AND TERM DEBT REPAYMENT CAPACITY	\$	16,955
LESS: Scheduled term principal payments		24,228

CAPITAL REPLACEMENT AND TERM DEBT REPAYMENT MARGIN (CRDRM)	\$	(7,273)
---	----	---------

TERM DEBT COVERAGE RATIO	0.823
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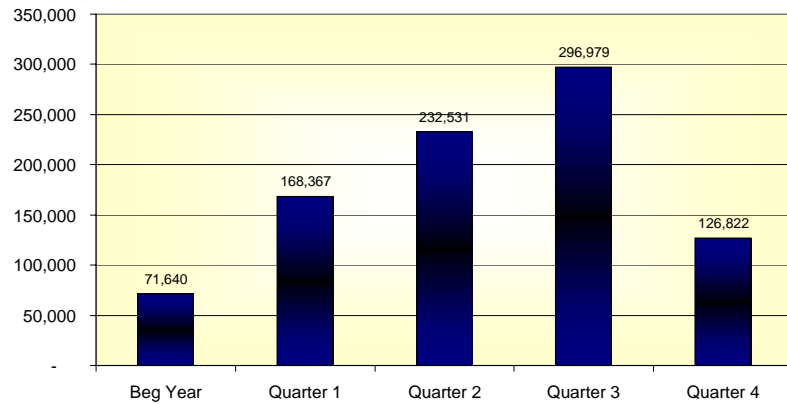
SENSITIVITY ANALYSIS:

% crop revenue can decline and maintain positive CRDRM	NA
% livestock revenue can decline and maintain positive CRDRM	NA
% farm operating expenses can increase and maintain positive CRDRM	NA
% interest expenses can increase and maintain positive CRDRM	NA

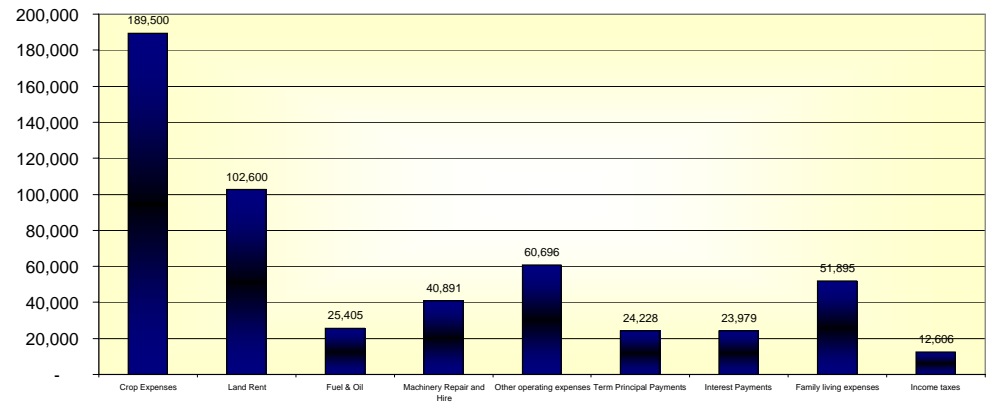
ESTIMATED WORKING CAPITAL (END OF YEAR)	\$	65,619
Cash & savings		1,004
Ending inventory		192,425
Prepays & receivables		27,212
Operating Loan		126,822
Accounts payable		-
Term principal due		24,228
Accrued interest		3,973
Note: Maximum operating loan	Quarter 3	\$ 296,979



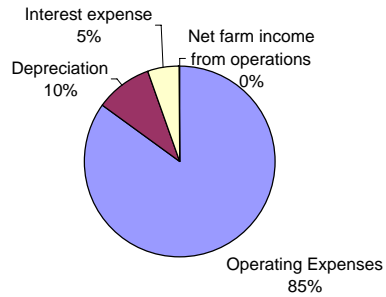
Operating Loan Balance



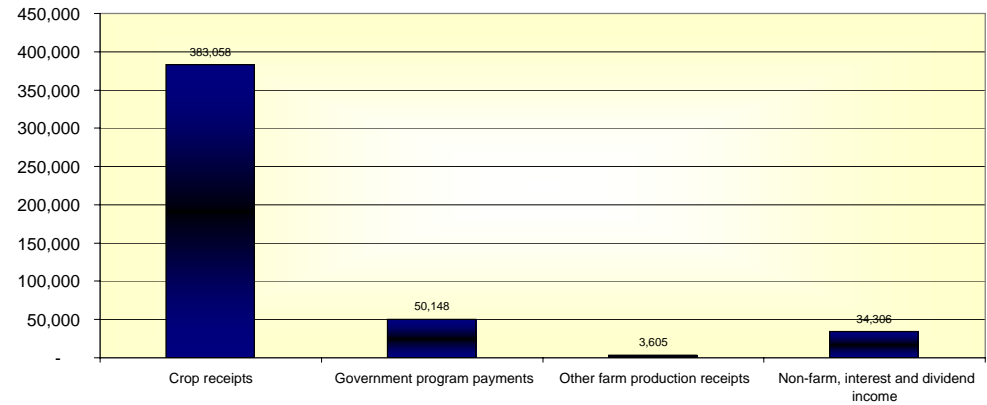
Uses of Funds



Proportion of Value of Farm Production



Sources of Funds



Break Even Price and Yield Combinations



		Break Even Price Combinations				Break Even Yield Combinations			
<u>Fix Price</u>	<u>Fix Yield</u>	Projections 2006	All Farm Operating Costs	Positive Income	Positive Cash Flow	Projections 2006	All Farm Operating Costs	Positive Income	Positive Cash Flow
	Corn	\$2.15	\$2.04	\$2.01	\$2.16	166	155	152	167
	Soybeans	\$5.85	\$5.55	\$5.47	\$5.87	50	47	46	50

Projections

Farm revenue	492,403	
Farm operating costs	467,227	
Income Before Interest and Taxes	25,176	<< All Farm Operating Costs
Interest expense	26,161	
Net Farm Income From Operations	(985)	
Nonfarm Income/Expenses	34,306	
Net income before taxes	33,321	<< Positive Income
+ Depreciation	48,135	
- Term principal payments	24,228	
- Family living	51,895	
- Income and SS taxes	12,606	
Capital Debt Margin (Cash flow)	(7,273)	<< Positive Cash Flow



FIELD OPERATION COST CALCULATION TOOL

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<p>Implement input</p> <p>Implement/size Chisel plow (15 ft)</p> <p>List price when new \$13,000</p> <p>Current age 0 years</p> <p>Speed 6 m.p.h.</p> <p>Width 15 feet</p> <p>Field efficiency 82.5% percent</p> <p>Acres 540 per year</p> <p>Years before sold 10 years</p> <p>Hours of use 60 per year</p> <p>Acres per hour 9.0 per hour</p> <p>Suggested h.p. 155 p.t.o. h.p.</p> <p style="text-align: center;"><input type="button" value="Use Implement Defaults"/></p>		<p>Intermediate implement values</p> <p>Purchase price \$11,050</p> <p>Salvage value \$3,784</p> <p>Repair costs per year \$169</p> <p style="text-align: right;"><input type="button" value="Use Defaults"/></p>																																	
		<p>Implement Costs</p> <table border="1"> <thead> <tr> <th>Item</th> <th>Per Year</th> <th>Per Hour</th> <th>Per Acre</th> </tr> </thead> <tbody> <tr> <td>Depreciation</td> <td>\$727</td> <td>\$12.12</td> <td>\$1.35</td> </tr> <tr> <td>Interest</td> <td>630</td> <td>10.50</td> <td>1.17</td> </tr> <tr> <td>Housing, insurance</td> <td>74</td> <td>1.23</td> <td>0.14</td> </tr> <tr> <td>Repairs</td> <td>169</td> <td>2.82</td> <td>0.31</td> </tr> <tr> <td>Total</td> <td>\$1,600</td> <td>\$26.67</td> <td>\$2.97</td> </tr> </tbody> </table>		Item	Per Year	Per Hour	Per Acre	Depreciation	\$727	\$12.12	\$1.35	Interest	630	10.50	1.17	Housing, insurance	74	1.23	0.14	Repairs	169	2.82	0.31	Total	\$1,600	\$26.67	\$2.97								
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<p>Tractor input</p> <p>Tractor type 170 PTO Hp Tractor</p> <p>Current age 0 years</p> <p>List price \$132,800 \$</p> <p>Horsepower 165 p.t.o.</p> <p>Years before sold 10 years</p> <p>Hours of use 300 per year</p> <p>Diesel fuel cost \$2.50 \$/gal.</p> <p>Lubrication cost 10% % of fuel</p> <p>Labor cost \$13.50 \$/hour</p> <p>Labor time 110% % field time</p> <p style="text-align: center;"><input type="button" value="Use Tractor Defaults"/></p>		<p>Intermediate tractor values</p> <p>Purchase price \$112,880</p> <p>Salvage value \$47,924</p> <p>Repair costs per year \$837</p> <p>Fuel use per hour 7.23</p> <p style="text-align: right;"><input type="button" value="Use Defaults"/></p>																																	
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COMBINE COST CALCULATION TOOL

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Combine/header input	Combine/Header Defaults		
	Separator	Corn Head	Grain Platform
Description	340 HP	12-row	35-ft
List price when new	\$254,000	\$68,000	\$31,000
Current age	0	0	0
Years before sold	7	7	7
Horsepower	340		
Width in feet		30	30
Speed (miles per hour)		3.8	3.8
Field efficiency		70%	73%
Acres per year		1,300	1,300

Intermediate values	Intermediate Value Defaults		
	Separator	Corn Head	Grain Platform
Purchase price	\$215,900	\$57,800	\$26,350
Salvage value	\$110,358	\$29,545	\$13,469
Acres per hour		9.7	10.1
Fuel use per hour		14.9	14.9
Fuel use per acre		1.5	1.5
Separator hours per year		134	129
Engine hours per year		174	168
Repairs per year	\$5,229	\$340	\$143

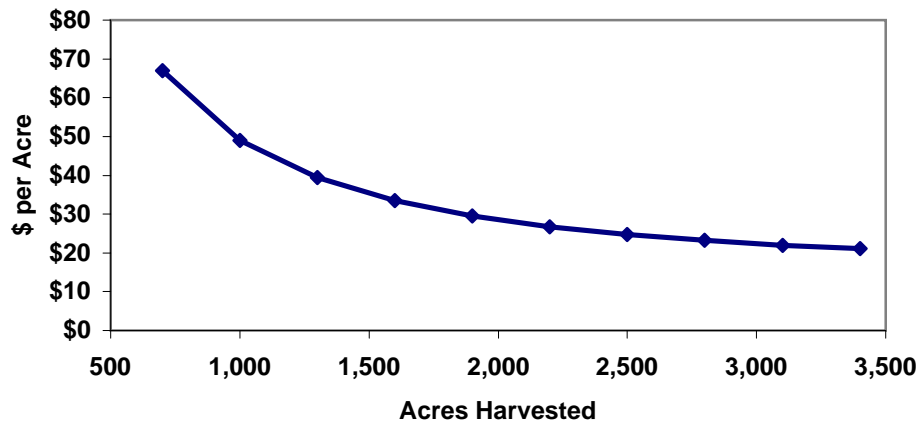
Main input	
Purchase price	85% % of list price
Interest rate	8.5% % of remaining value
Housing, insurance	1.0% % of remaining value
Diesel fuel cost	\$2.50 \$ per gallon
Lubrication cost	10% % of fuel cost
Labor cost	\$13.50 \$ per hour
Labor time	110% % of tractor time

Yearly Use and Costs	Combine			
	Corn Head	Grain Platform	(without heads)	Total
Depreciation	\$4,036	\$1,840	\$15,077	\$20,953
Interest	3,712	1,692	13,866	19,270
Insurance, house	437	199	1,631	2,267
Repairs	340	143	5,229	5,712
Fuel and lub			10,797	10,797
Labor			3,906	3,906
Total Costs	\$8,525	\$3,874	\$50,506	\$62,905

Per Acre Use and Costs	Per Acre		
	Corn Head	Grain Platform	Average
Depreciation	\$8.90	\$7.21	\$8.06
Interest	8.19	6.63	7.41
Insurance, house	0.96	0.78	0.87
Repairs	2.27	2.12	2.20
Fuel and lub	4.15	4.15	4.15
Labor	1.50	1.50	1.50
Total Costs	\$25.97	\$22.39	\$24.19

Sensitivity of average per acre costs to total acres harvested % corn 50%

Total Acres	Cost Per Acre
700	\$66.89
1,000	\$48.96
1,300	\$39.37
1,600	\$33.49
1,900	\$29.59
2,200	\$26.79
2,500	\$24.76
2,800	\$23.21
3,100	\$22.02
3,400	\$21.10





Grain Storage Purchase Analysis

Comparison

Estimated Cost:		Per Bu
Construction & equipment costs	\$ 41,000	1.640
Site preparation	1,500	0.060
Electrical wiring	1,000	0.040
LESS: contributions of operator	- 0	-
xxxx	-	-
xxxx	-	-
Total building costs	\$ 43,500	1.740

Bushel capacity	25,000
Commodity	corn

Depreciation:	<input checked="" type="checkbox"/> MACRS	<input checked="" type="checkbox"/> Straight Line
Expense and 179 expense election	\$ -	
5-year depreciable property	-	
7-year depreciable property	43,500	
10-year depreciable property	-	
Depreciable property	\$ 43,500	

Financing :	
Down payment (% of total building costs)	25%
Length of loan (years)	10
Interest rate on loan	7.500%

Other Overhead Costs:	Per Bu	Per \$100 Building Cost
Annual repair and maintenance costs	\$ 1,500	0.060
Real estate taxes	500	0.020
Insurance (Bins and Equipment)	250	0.010
Insurance (Grain theft)	250	0.010
Annual increase in costs	1%	

Investor Information:	
Marginal income tax rate	20%
Discount rate	6.50%
Time horizon (years)	12
Estimated market value at end of horizon	\$ 3,000

Estimated Annualized Ownership Costs		
Time Horizon (years)	12	Per bushel
Depreciation	\$ 4,149	\$ 0.166
Financing costs	1,419	0.057
Other overhead costs	2,623	0.105
Total costs before taxes	\$ 8,190	\$ 0.328
Tax savings	(1,638)	(0.066)
Estimated Annual Costs After Taxes	\$ 6,552	\$ 0.262
Adjusted for Ending Market Value	6,414	0.257

Does not include drying and other utility costs

Annual Cash Flows	Year	Downpayment and Principal	Interest Payments	Annualized Costs	Tax Savings	Total Cash Outflow
		\$ 10,875				\$ 10,875
	1	2,306	\$ 2,447	\$ 2,500	1,922	5,331
	2	2,479	2,274	2,525	2,624	4,654
	3	2,665	2,088	2,550	2,235	5,068
	4	2,865	1,888	2,576	1,958	5,370
	5	3,080	1,673	2,602	1,921	5,434
	6	3,311	1,442	2,628	1,880	5,501
	7	3,559	1,194	2,654	1,835	5,572
	8	3,826	927	2,680	1,254	6,179
	9	4,113	640	2,707	669	6,791
	10	4,421	332	2,734	613	6,874
	11			2,762	552	2,209
	12			2,789	558	2,231



Cost and Benefits of On-Farm Storage

Grain Bin and Commercial Storage: Costs/Benefits			
	Per Wet Bushel		
Drying Costs:			
Commercial storage per point		\$ 0.020	
On-farm storage per point		\$ 0.015	
Commercial Storage Costs:			
Estimated months before sale	6 months		
Minimum storage cost/bu. (drop charges)		\$ 0.200	
Months of minimum storage	3 months		
Monthly storage cost/bu, after minimum		\$ 0.020	
Other on-farm utility storage costs/bu per month			
Shrink Costs:			
Typical harvest moisture		18.0%	
Moisture and Shrink factors:	Storage Moisture	Shrink factor	
Commercial storage	14.0%	1.4	
On-farm storage	15.5%		
Transportation Costs (per unit):			
Commercial storage			
Field to commercial storage per wet bushel		\$ 0.090	
On-farm Grain Bin			
Field to bin per wet bushel		\$ 0.050	
Bin to terminal per dry bushel		\$ 0.090	
Quantity and Quality Premiums for On-Farm Storage			
Per dry bushel quality premium or discount		\$ 0.025	
% Quantity gain (loss) from on-farm storage			
Estimated per bushel corn price		\$ 3.500	

	On-farm	Commercial	Benefit On-farm Storage	Per Bushel
Drying charges:				
per unit points	\$ 0.015	\$ 0.020		
Wet bushels	25,762	25,762		
<i>Estimated Drying Costs</i>	\$ 966	\$ 2,061	\$ 1,095	\$ 0.044
Shrink Costs:				
Estimated Dry Bushels For Sale	25,000	24,320		
<i>Estimated value</i>	\$ 87,500	\$ 85,118	\$ 2,382	\$ 0.095
Storage Costs:				
Minimum storage costs		\$ 4,864		
Other monthly storage costs	\$ -	\$ 1,546		
<i>Total storage costs</i>	\$ -	\$ 6,410	\$ 6,410	\$ 0.256
Transportation Costs (per unit):	\$ 3,538	\$ 2,319	\$ (1,220)	\$ (0.049)
Quantity and Quality Premiums:				
On-farm quality premium	\$ 625			
On-farm quantity loss or gain	-			
<i>Total premiums</i>	\$ 625		\$ 625	\$ 0.025
Total Annual Benefit (Cost) of On-Farm Storage (after tax)			\$ 7,433	\$ 0.297
LESS: Total Annual Costs of On-Farm Storage			\$ 6,552	\$ 0.262
Net Annual Benefit (Cost) of On-Farm Storage			\$ 881	\$ 0.035
Total Building Costs that would result in \$0 Net Annual Benefit			\$ 52,105	\$ 2.084
Current Building Costs			\$ 43,500	\$ 1.740



Real Estate Purchase Analysis

Used to determine the maximum bid price of a real estate investment opportunity and sensitivity to terms.

Real Estate and Investment Information:		Financing Information:	
Analysis price	\$ 3,000	Down payment (%)	25%
Additional cash flows: year 1	\$ 180	Annual interest rate on loan (%)	8.000%
<i>Optional: Enter specific cash flows</i>		Length of loan (years)	20
Property taxes: year 1	\$ 25.00		
Annual cash flow growth rate (%)	1.00%	Investor Information:	
Annual appreciation rate of land values (%)	3.00%	Marginal tax rate (%)	30%
Closing fees (% initial purchase)	1.00%	Capital gains tax rate (%)	18%
Selling fees (% end of horizon)	4.00%	After-tax discount rate (%)	6.000%
Amount qualifying for depreciation	\$ -	Solver Information:	
Length to depreciate (years)	3	Investment return sensitivity range (%)	2%
Depreciation method *	Straight Line (full year)	Cash flow sensitivity range (%)	10%
Additional depreciation 1st year (179 election)	\$ -		
Results			
Profitability @ Analysis Price (NPV)		Maximum Bid Price	
5 year investment horizon	(\$71)	5 year investment horizon	\$2,603
10 year investment horizon	(\$59)	10 year investment horizon	\$2,801
30 year investment horizon	(\$197)	30 year investment horizon	\$2,681
Investment Return @ Analysis Price		Initial Cash Flow Needed to Achieve Desired Return	
5 year investment horizon	4.26%	5 year investment horizon	\$203.7
10 year investment horizon	5.37%	10 year investment horizon	\$191.0
30 year investment horizon	5.43%	30 year investment horizon	\$198.4
Cash Flow Growth Rate Needed to Achieve Desired Return		Appreciation Rate Needed to Achieve Desired Return	
5 year investment horizon	8.54%	5 year investment horizon	3.71%
10 year investment horizon	2.67%	10 year investment horizon	3.34%
30 year investment horizon	2.01%	30 year investment horizon	3.62%