

# ***Financial Risks for Minnesota Producers Income Trends and Production Costs***

***Minnesota Crop Insurance Conference  
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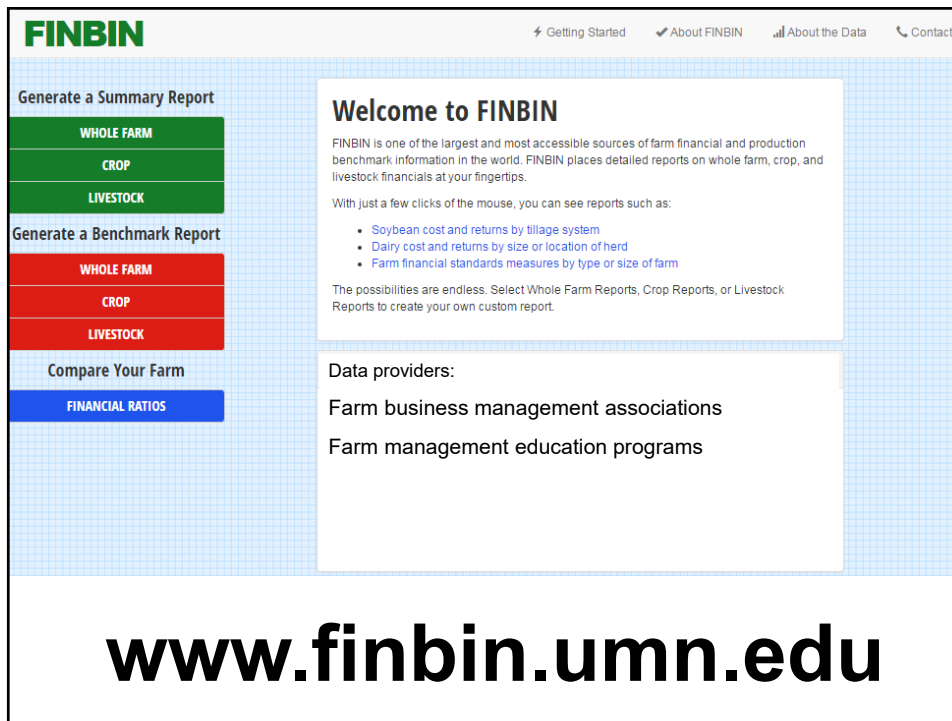
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# FINPACK®

A comprehensive farm financial  
planning and analysis software

 Center for Farm Financial Management  
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The screenshot shows the FINBIN website interface. At the top left is the FINBIN logo. The top right navigation bar includes links for "Getting Started", "About FINBIN", "About the Data", and "Contact". On the left side, there are three main sections: "Generate a Summary Report" with buttons for "WHOLE FARM", "CROP", and "LIVESTOCK"; "Generate a Benchmark Report" with buttons for "WHOLE FARM", "CROP", and "LIVESTOCK"; and "Compare Your Farm" with a button for "FINANCIAL RATIOS". The main content area features a "Welcome to FINBIN" section with a paragraph describing the service and a list of report types: "Soybean cost and returns by tillage system", "Dairy cost and returns by size or location of herd", and "Farm financial standards measures by type or size of farm". Below this is a "Data providers:" section listing "Farm business management associations" and "Farm management education programs". At the bottom of the page, the URL [www.finbin.umn.edu](http://www.finbin.umn.edu) is displayed in large, bold black text.

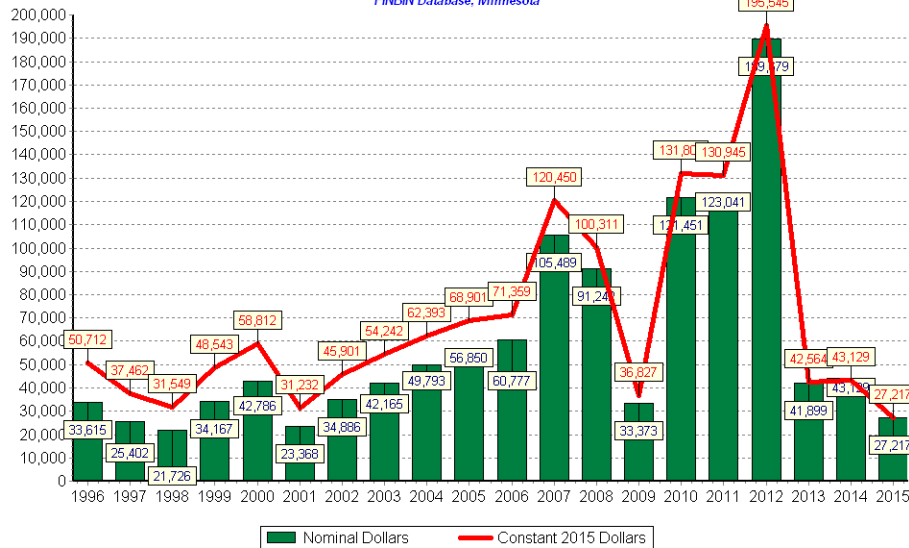
# FINBIN Database

Sales Class	All Minnesota Farms	Minnesota Farms in FINBIN	Percent in FINBIN
<\$100,000	48,500	232	0.5%
\$100,001 – 250,000	8,600	391	5%
\$250,001 – 500,000	6,400	528	8%
\$500,001 – 1,000,000	5,300	544	10%
>\$1,000,000	5,200	489	9%

\*Source: Minnesota Ag News – Farms and Land in Farms, United States Department of Agriculture, National Agricultural Statistics Service, Washington, D.C., February 19, 2015.

## Median Net Farm Income

FINBIN Database, Minnesota



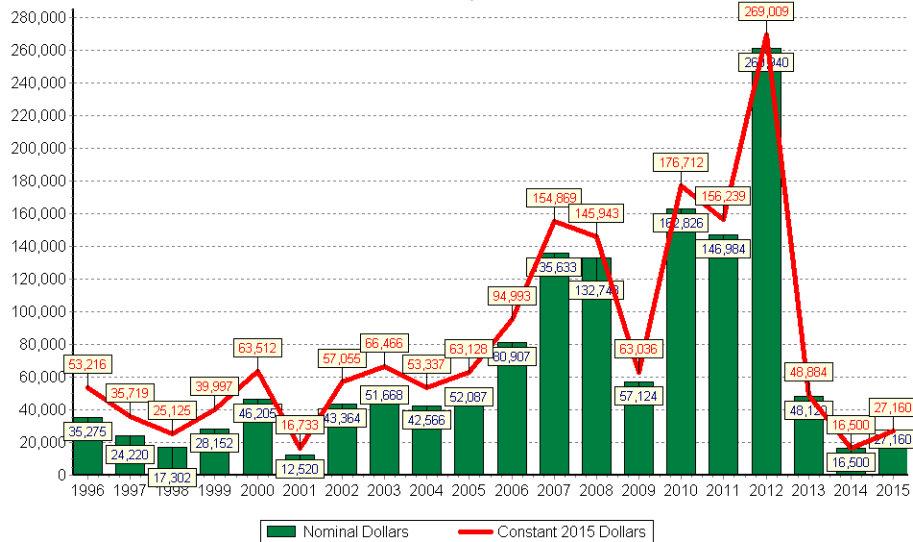
Data Sources: Minnesota Farm Business Management Education, MnSCU  
Southwestern Minnesota Farm Business Management Associations, U of M  
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# Crop Farms

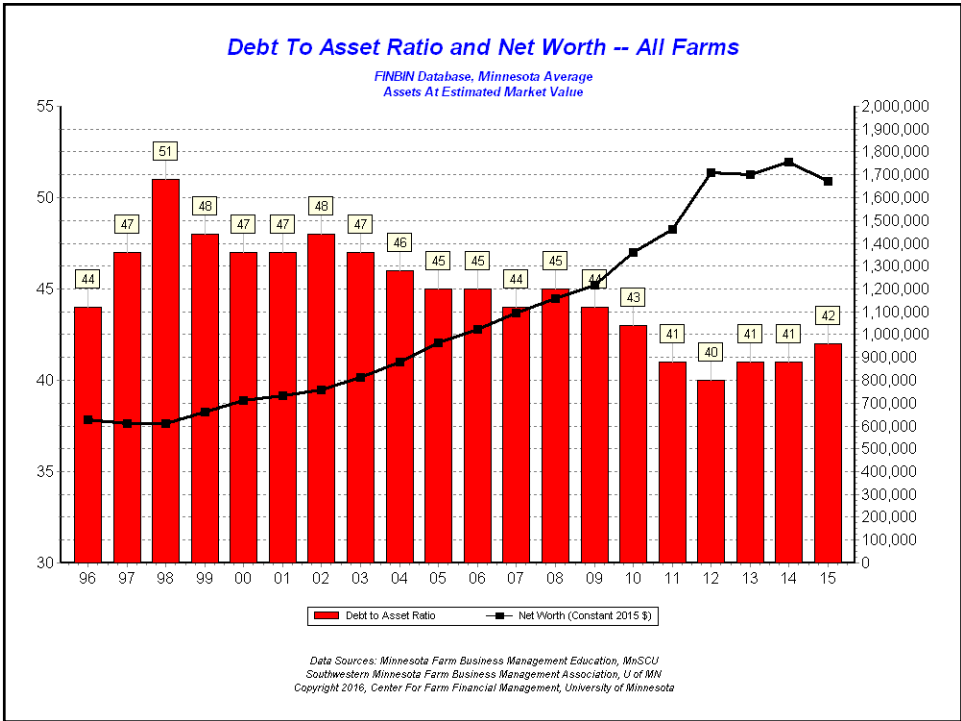
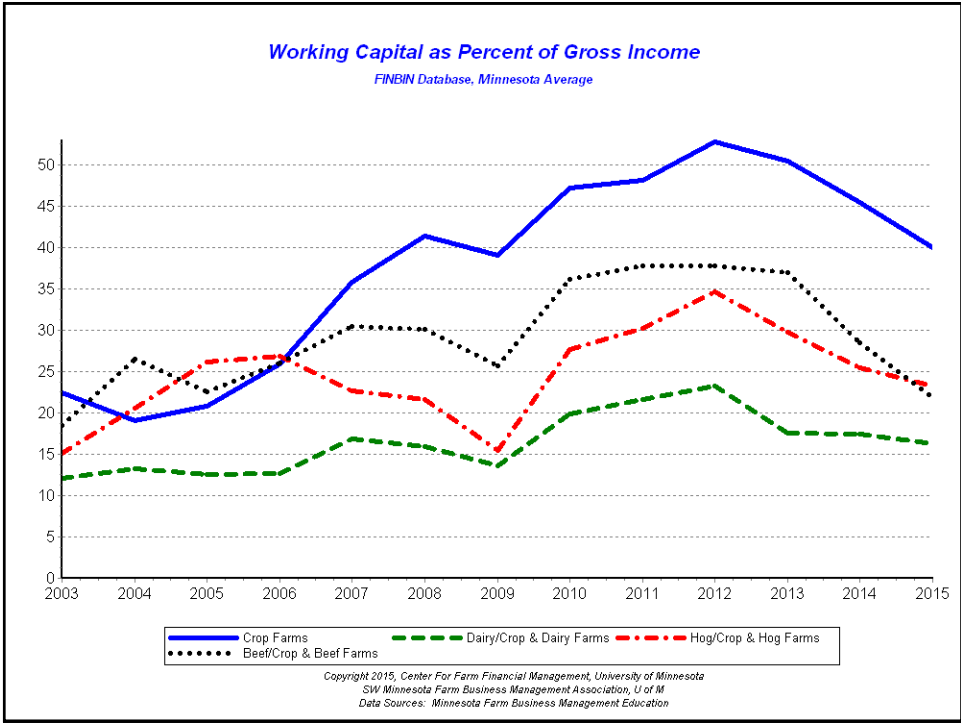


**Median Net Farm Income - Crop Farms**

FINBIN Database, Minnesota



Data Sources: Minnesota Farm Business Management Education, MnSCU  
 Southwestern Minnesota Farm Business Management Associations, U of MN  
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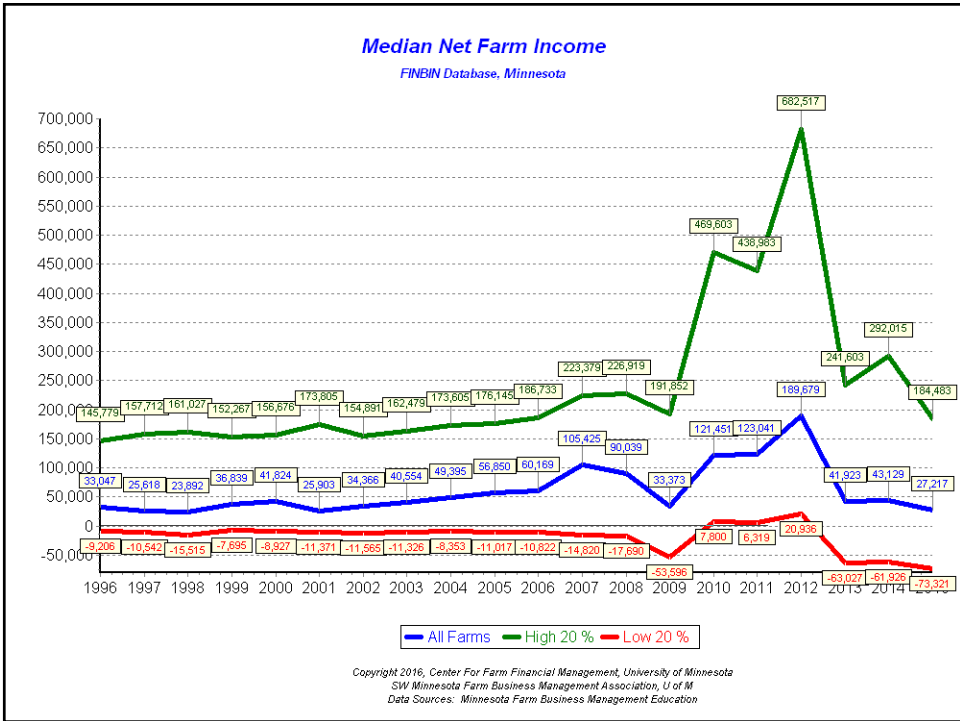
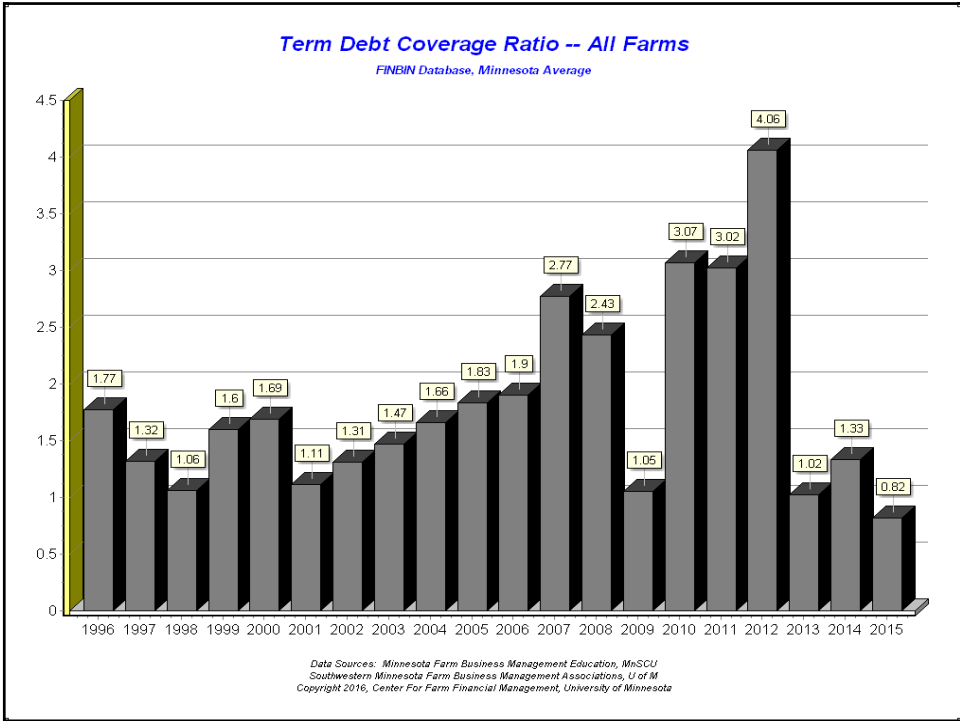
## Minnesota statewide farm land median sales price/acre declined 5.5% in 2015 compared to 2014.

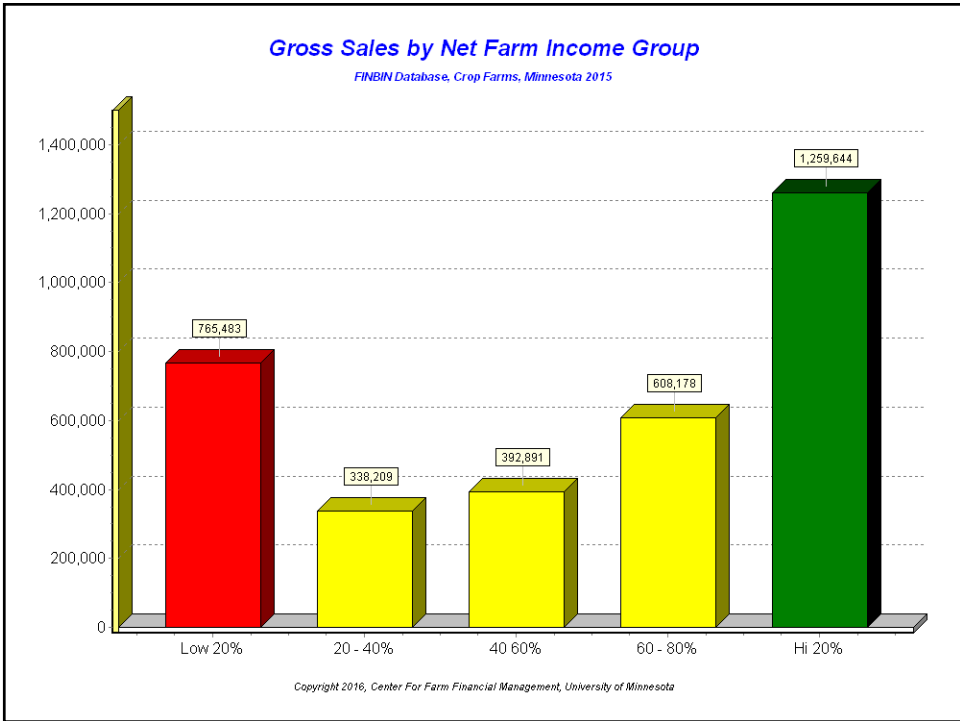
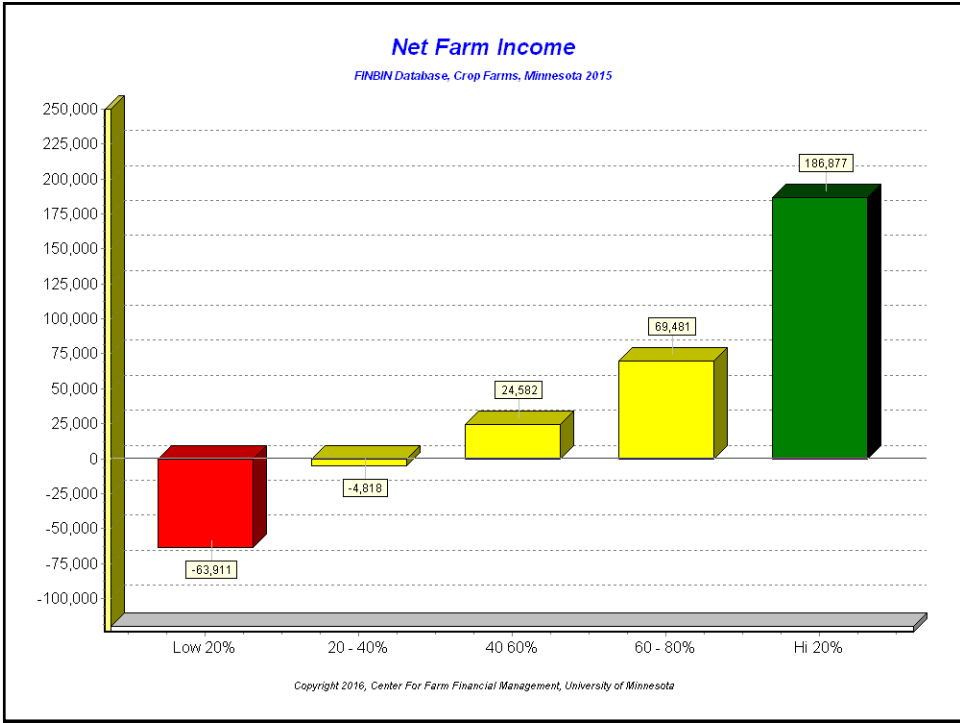
- Minnesota Farm Real Estate Sales: 1990-2015, Bill Lazarus, Department of Applied Economics, University of Minnesota

## Average Annual Change in Land Rental Rates

	2011-2015	2014-2015
Northwest	5.8%	-3.7%
West Central	5.2%	0.7%
Central	4.9%	-5.6%
East Central	12.7%	15.4%
Southwest	5.7%	-5.9%
South Central	5.8%	-5.8%
Southeast	4.9%	-5.9%
State	6.8%	-5.3%

FINBIN Database: [www.finbin.umn.edu](http://www.finbin.umn.edu)







## High vs. Low Profit Crop Farms 2015 Gross Income >\$1M

	Low	High
Gross sales	\$1,637,000	\$2,283,000
Median net farm income	-175,000	436,000
Term debt coverage (accrual)	-0.55	2.11
Age	52	49
Years farming	30	28
Debt to asset	46%	32%
Current ratio	1.11	2.75
Working capital to gross	9%	61%
Working capital	\$133,000	\$1,486,000
Change in working capital	-267,000	-160,000

*Minnesota, North Dakota, Nebraska, Missouri*

## High vs. Low Profit Crop Farms 2015 Gross Income >\$1M

	Low	High
Total crop acres	3,156	3,753
Percent of crop acres owned	20%	31%
Machinery investment per acre	\$610	\$560
Corn yield	175	188
Soybean yield	45	45
Spring wheat yield	64	69
Corn price	\$3.74	\$3.88
Soybean price	\$9.32	\$9.79
Spring wheat price	\$5.38	\$5.54
Asset turnover	32%	34%
Operating profit margin	-17%	17%

*Minnesota, North Dakota, Nebraska, Missouri*

## *Looking Ahead*



## **Corn, Cash Rented**

*FINBIN Database, Southern MN*

	2011	2012	2013	2014	2015	2016 Estimated	2017 Projected
Seed	104.58	115.88	125.48	128.46	123.34	117.17	113.66
Fertilizer	153.58	194.49	191.40	167.27	145.89	131.30	111.61
Chemicals	27.51	31.54	34.21	35.25	36.67	37.77	37.77
Fuel & drying	38.59	41.22	56.85	57.14	32.10	28.89	28.89
Crop insur.	24.67	24.29	25.89	22.74	22.84	21.01	19.96
Rent	191.29	227.07	250.27	250.87	235.25	223.49	212.31
Other	184.52	190.36	199.85	197.41	190.35	180.83	171.79
Total cost	724.74	824.85	883.95	859.14	786.44	740.47	695.99

## Corn, Cash Rented

FINBIN Database, Southern MN

	2016 Estimated	2017 Projected
Yield	200	180
Price	3.00	3.50
Value	600	630
Total cost	740	696
Net return	-140	-66

- Does not include potential government price support payments which might vary from \$0 to \$80 per acre
- Farmers need \$35 to \$55 per acre returns to cover family needs

## Corn, Cash Rent, Net Income Per Acre

Assumes 2017 projected expenses

### Yield per Acre

Price/Bu	150	165	180	195	210
2.50	-321	-283	-246	-208	-171
3.00	-246	-201	-156	-111	-66
3.50	-171	-118	-66	-13	39
4.00	-96	-36	24	84	144
4.50	-21	47	114	182	249

## Soybeans, Cash Rented

FINBIN Database, Southern MN

	2011	2012	2013	2014	2015	2016 Estimated	2017 Projected
Seed	51.87	57.05	60.14	60.84	58.22	56.47	54.78
Chemicals	28.52	32.12	35.21	39.07	44.76	46.10	46.10
Fuel	21.52	23.00	22.70	22.12	15.11	13.60	13.60
Crop insur.	24.95	23.40	23.55	21.32	21.09	19.40	19.79
Rent	185.50	222.42	240.79	247.57	231.65	220.07	209.06
Other	134.07	150.39	157.39	152.38	152.33	144.71	137.48
Total cost	446.43	508.38	539.78	543.30	523.16	500.36	480.81

## Soybeans, Cash Rented

FINBIN Database, Southern MN

	2016 Estimated	2017 Projected
Yield	57	50
Price	9.00	9.00
Value	513	450
Total cost	500	481
Net return	-13	-31

- Government price support payments are projected to be minimal for soybean acres
- Farmers need \$35 to \$50 per acre returns to cover family needs

**Soybeans, Cash Rent, Net Income Per Acre**  
*Assumes 2017 projected expenses*

**Yield per Acre**

Price/Bu	42	46	50	54	58
7	-187	-159	-131	-103	-75
8	-145	-113	-81	-49	-17
9	-103	-67	-31	5	41
10	-61	-21	19	59	99
11	-19	25	69	113	157



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