

# 2017

# FARM

# ANALYSIS

# REPORT OF

# MOORHEAD

42<sup>nd</sup> Edition

---



**NORTHLAND**  
COMMUNITY & TECHNICAL COLLEGE

**Farm Business Management Program**

**[www.NorthlandFBM-Moorhead.com](http://www.NorthlandFBM-Moorhead.com)**

March 15, 2018

## INTRODUCTION

This is the 42<sup>nd</sup> edition of this report published by the Northland College-Moorhead MN. Farm Business Management Department. The original numbers for this report came from pages of the account book and/or from computerized records kept by each farm family enrolled in the farm management education program provided by Northland Community and Technical College, Thief River Falls, MN. After a closeout procedure to check the accuracy of the records, the analysis is generated for each individual enrollee.

We use the FINPACK and RANKEM software system developed by the Center for Farm Financial Management, University of Minnesota Extension, to do our year-end analysis. This is an excellent farm financial computer package because it incorporates the year-end analysis with a farmers beginning and ending Balance Sheet and with projected Cash Flow.

Our Farm Analysis Report of Moorhead is divided into two sections. The white section is devoted to the financial averages of our enrollee's. The color section is the overall average for each crop produced.

Use your imagination and figure out ways to use the tables. There are many factors that can affect a farm operations' profitability. So look and compare your numbers to the averages and see where you could fine-tune your farming operation.

Information about our Farm Business Management program and other financial reports can be found at our website: **[www.NorthlandFBM-Moorhead.com](http://www.NorthlandFBM-Moorhead.com)**

Have a Successful and Prosperous year!

### **Ron Dvergsten**

Farm Bus. Mgt. Instructor  
NCTC-Moorhead Minnesota  
(218) 299-5827  
[Ron.Dvergsten@northlandcollege.edu](mailto:Ron.Dvergsten@northlandcollege.edu)

### **Josh Tjosaas**

Farm Bus. Mgt. Instructor  
NCTC-Moorhead Minnesota  
(218) 299-5863  
[Josh.Tjosaas@northlandcollege.edu](mailto:Josh.Tjosaas@northlandcollege.edu)

---

## ***Financial Guideline Measures***

---

The Farm Financial Standards Task Force recommended the use of these financial measures to evaluate a farm's financial position and financial performance. These measures are grouped by: Liquidity, Solvency, Profitability, Repayment Capacity, and Efficiency.

### **Liquidity**

Liquidity is the ability of the farm business to meet financial obligations in a timely manner, without disrupting normal business operations.

**Current Ratio:** The current ratio shows the value of current assets relative to current liabilities. It measures the extent current farm assets, if liquidated, would cover liabilities that are due during the next 12 months. The higher the ratio, the safer the short term position.

**Working Capital:** Working capital shows the dollar amount that current assets can or cannot cover current liabilities. It approximates the amount of capital available to purchase crop and livestock inputs and equipment necessary to produce farm products. The amount of working capital considered adequate must be related to the size of the farm business.

**Working Capital to Gross Revenues:** Measures operating capital available against the size of the business.

### **Solvency**

Solvency is important in evaluating the risk position of the farm and family and in considering future borrowing capacity. Solvency measures the ability of the business to pay off all debts if liquidated.

**Farm Debt To Asset Ratio:** The farm debt to asset ratio measures the financial position or solvency of the farm or ranch by comparing the total liabilities to the total assets. It measures the portion of the farm assets that have debt against them. A higher ratio is considered an indicator of greater financial risk.

**Farm Equity To Asset Ratio:** The farm equity to asset ratio measures the farm equity relative to the value of the farm assets. It measures the proportion of the farm assets financed by the owner's equity whereas the debt to asset ratio measured the proportion of farm assets financed by debt.

**Farm Debt To Equity Ratio:** The farm debt to equity ratio measures the amount of farm debt relative to the amount of farm equity. It measures the amount of debt the farm has for every dollar of equity.

### **Profitability**

Profitability is the measure of the value of goods produced by the business in relation to the cost of resources used in the production. Profitability calculated on a cost basis does not consider changes in market valuation of capital assets such as machinery and breeding livestock.

**Rate of Return on Assets:** Rate of return on assets is, in effect, the interest rate your farm earned in the past year on all money invested in the business. If assets are valued at market value, the rate of return on investment can be looked at as the "opportunity cost" of investing money in the farm instead of alternative investments. If assets are valued at cost (cost less depreciation), the rate of return represents the actual return on the average dollar invested in the business.

**Rate of Return on Equity:** Rate of return on equity is, in effect, the interest rate your investment in the business earned in the past year. If assets are valued at market value, this return can be compared with returns available if the assets were liquidated and invested in alternative investments. If assets are valued at cost, this represents the actual return to the amount of equity capital you have invested in the farm business.

If your return on assets is higher than your average interest rate, your return on equity will be still higher, reflecting the fact that there are residual returns to equity capital after paying all interest expense. This is positive use of financial leverage. If your return on assets is lower than your average interest rate, your return on equity will be still lower, reflecting the fact that borrowed capital did not earn enough to pay its interest cost. This is negative financial leverage. Profitability becomes a key concern when substantial debt capital is used in the business.

---

---

## ***Financial Guideline Measures***

---

**Net Farm Income:** Net farm income represents the returns to labor, management, and equity capital invested in the business. Without income from other sources, or appreciation of capital asset values, net farm income must cover family living expenses and taxes, or net worth will decrease.

**Operating Profit Margin:** The operating profit margin is a measure of the profit margin from the employment of assets. It measures how effectively you are employing assets relative to the value of output produced. Low prices, high operating expenses, or production problems are all possible causes of a low operating profit margin.

**EBITDA:** This factor stands for: Earnings Before Interest, Taxes, Depreciation and Amortization. This represents a measure of earnings available for debt repayment.

### **Repayment Capacity**

Repayment capacity shows the borrower's ability to repay term debts (longer than one year) on time. This includes non-farm income, and is therefore not a measure of business performance alone.

**Capital Debt Repayment Capacity:** Measures the amount generated from farm and non-farm sources, to cover debt repayment and capital replacement.

**Capital Debt Repayment Margin:** The amount of money remaining after all operating expenses, taxes, family living costs, and scheduled debt payments have been made. It is the money left, after paying all expenses, which is available for purchasing/financing new machinery, equipment, land or livestock.

**Replacement Margin:** The replacement margin is the amount of income remaining after paying principal and interest on term loans and unfunded (cash) capital purchases.

**Term Debt Coverage Ratio:** The term debt coverage ratio measures the ability of the business to cover all term debt payments. A number less than 100 percent indicates that the business, plus non-farm income, is not generating sufficient cash to meet all of the debt payments, after family living expenses and taxes have been paid. A number greater than 100 indicates the business is generating sufficient cash to pay all term debt obligations with some surplus margin remaining.

**Replacement Margin Coverage Ratio:** This represents the ability to term debt and unfunded capital purchases. A ratio under 1.0 indicated that you did not generate enough income to cover term debt payments and unfunded capital purchases.

### **Efficiency**

These measures reflect the relationships between expense and income items to revenue and the efficiency of the farm business with regard to the use of cash and capital assets.

**Asset Turnover:** Asset turnover is a measure of how efficiently assets are used in the business. A farm with good operating profit margin and asset turnover will show a strong rate of return on farm assets. If operating profit margin is low, the asset turnover rate must be strong, or vice versa, to maintain the rate of return on assets.

**Operating Expense Ratio:** This ratio indicates the percent of the gross farm income, which is used to pay the operating expenses. Operating expenses do not include interest or depreciation expense.

**Depreciation Expense Ratio:** This ratio indicates the percent of the gross farm income, which is used to cover the depreciation expense.

**Interest Expense Ratio:** This ratio indicates the percent of the gross farm income, which is used to pay farm interest expenses.

**Net Farm Income Ratio:** The ratio indicates the percent of the gross farm income, which remains after all expenses.

---

# MyFarm Financial Scorecard

Year: \_\_\_\_\_

Name: \_\_\_\_\_

<b>Liquidity</b>	This Year	5-Year Ave	Strong	Vulnerable
Current ratio			1.7	1.1
Working capital				
Working cap to gross revenue			25%	10%
<b>Solvency (market)</b>				
	Note: These solvency ratios include deferred liabilities			
Farm debt/asset ratio			30%	60%
Farm equity/asset ratio			70%	40%
Farm debt/equity ratio			0.43	1.50
<b>Profitability (Cost)</b>				
Rate of return on farm assets			8%	4%
Rate of return on farm equity			10%	3%
Operating profit margin			25%	15%
Net farm income				
EBITDA				
<b>Repayment Capacity (Accrual)</b>				
Capital debt repay capacity				
Capital debt repay margin				
Replacement margin				
Term-debt coverage ratio			1.50	1.20
Replacement margin ratio			1.40	1.10
<b>Financial Efficiency</b>				
Asset-turnover rate (market)			45%	30%
Operating-expense ratio			60%	80%
Depreciation-expense ratio			5%	15%
Interest-expense ratio			5%	10%
Net farm income ratio			20%	10%

# Financial Standards Measures

## Moorhead Farm Business Management Program - Northland College

	<u>5-yr Average</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
<b>Number of Farms</b>	65.2	74	68	64	62	58
<b>Liquidity</b>						
Current Ratio	1.73	1.51	1.82	1.88	1.72	1.73
Working Capital	344,256	272,718	353,663	407,578	342,136	345,185
Working Cap/Gross Revenue	33.2%	24.1%	33.3%	38.1%	35.3%	35.2%
<b>Solvency (market)</b>						
Farm Debt to Asset	38%	41%	42%	41%	39%	27%
Farm Equity to Asset	62%	59%	58%	59%	61%	73%
Farm Debt to Equity	0.63	0.69	0.72	0.71	0.65	0.38
<b>Profitability (cost)</b>						
Rate of Return on Assets	1.8%	2.6%	4.6%	2.6%	-0.5%	-0.3%
Rate of Return on Equity	0.5%	1.5%	5.1%	1.5%	-3.2%	-2.6%
Operating Profit Margin	4.5%	6.4%	11.6%	7.0%	-1.5%	-0.9%
Net Farm Income	84,810	108,593	158,418	105,808	21,990	29,242
EBIDTA	207,104	233,153	281,090	240,523	142,377	138,376
<b>Repayment Capacity</b>						
Capital Debt Repay Capacity	93,097	136,321	178,715	131,631	14,361	4,459
Capital Debt Repay Margin	-20,254	28,879	79,207	15,738	-109,434	-115,659
Replacement Margin	-66,651	-25,379	23,193	-34,581	-151,424	-145,064
Term Debt Coverage Ratio	0.87	1.27	1.80	1.14	0.12	0.04
Replacement Coverage Ratio	0.58	0.84	1.17	0.79	0.09	0.03
<b>Efficiency</b>						
Asset Turnover Rate	37.5%	40.2%	40.0%	37.6%	33.6%	35.9%
Operating Exp Ratio	80.3%	79.4%	73.5%	77.5%	85.3%	85.9%
Depreciation Exp Ratio	7.6%	6.8%	7.2%	7.9%	8.8%	7.5%
Interest Exp Ratio	4.3%	4.2%	4.3%	4.7%	4.4%	3.7%
Net Farm Inc Ratio	7.9%	9.6%	14.9%	9.9%	2.3%	3.0%

**Farm Income Statement**  
**2017 Moorhead Farm Business Management Annual Report**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	74	14	15	15	15	15
<b>Cash Farm Income</b>						
Barley	6436	10,148	10,757	-	-	- 11,522
Beans, Navy	1,337	7,066	-	-	-	-
Corn	191,660	340,712	229,609	42,987	206,786	148,143
Hay, Alfalfa/Grass	2,889	-	-	13,339	-	915
Other Crops	1,370	1,975	3,464	-	1,449	-
Soybeans	264,349	390,267	187,835	153,324	258,739	339,973
Soybeans Seed	29,937	2,877	-	20,059	55,786	69,158
Straw	1,455	2,709	-	3,410	1,242	-
Sugar Beets	250,496	198,313	94,389	82,229	242,421	631,647
Wheat, Spring	204,847	207,175	89,812	91,575	247,862	387,967
Soybeans, Food	17,901	33,482	-	14,388	23,693	18,981
	-	-	-	-	-	-
	-	-	-	-	-	-
Hay	837	4,422	8373	-	-	-
Livestock	12,587	2,802	-	-	-	51,108
Crop government payments	16,840	19,000	10,487	9,679	16,338	28,842
CRP payments	781	1,005	310	1,682	861	63
Other government payments	3,657	-	593	-	-	17,446
Custom work income	19,302	10,215	4,720	1,403	4,330	75,237
Patronage dividends, cash	18,431	17,801	13,615	8,668	19,864	32,165
Crop insurance income	20,157	32,282	35,424	5,910	18,002	9,976
Property insurance income	2,567	3,456	850	1,726	-	6,862
Other farm income	40,767	81,189	6,617	27,299	45,978	45,445
Gross Cash Farm Income	1,108,602	1,366,895	696,856	477,676	1,143,351	1,875,450

**Farm Income Statement (continued)**  
**2017 Moorhead Farm Business Management Annual Report**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	74	14	15	15	15	15
<b>Cash Farm Expense</b>						
Seed and plants	143,491	190,379	86,493	62,374	135,113	246,225
Fertilizer	102,696	133,090	84,511	44,311	107,945	145,648
Crop chemicals	92,508	111,709	63,973	40,615	77,263	170,263
Cover crop expense	55	-	-	-	271	-
Crop insurance	37,262	59,050	23,717	19,047	33,652	52,294
Drying expense	2,817	5,536	1,379	1,696	4,314	1,340
Storage	883	620	288	1,256	1,670	562
Crop custom hire	11,098	12,711	11,542	5,939	20,835	4,572
Crop hauling and trucking	4,385	4,133	1,414	2,126	7,798	6,436
Crop marketing	753	579	188	432	1,656	897
Crop miscellaneous	7,186	18,644	8,828	3,385	1,838	3,997
Consultants	4,400	3,956	2,568	2,252	3,705	9,488
Feeder livestock purchase	5,384	-	-	-	-	26,561
Purchased feed	1,785	1,161	3,832	120	-	3,771
Breeding fees	66	-	327	-	-	-
Veterinary	959	4,436	317	-	-	276
Supplies	185	603	159	4	-	186
Livestock custom hire	217	-	1,072	-	-	-
Grazing fees	30	-	150	-	-	-
Livestock hauling and trucking	148	-	-	-	-	730
Livestock marketing	47	-	67	-	-	163
Interest	45,765	71,619	27,379	25,150	36,019	70,382
Fuel & oil	37,400	48,655	22,599	16,649	33,391	66,454
Repairs	74,044	100,707	47,782	27,984	69,771	125,754
Custom hire	605	-	-	-	-	2,983
Hired labor	75,993	196,319	22,212	15,388	45,707	108,361
Land rent	195,301	265,586	136,265	72,811	218,988	287,540
Stock/quota lease	17,467	11,955	16,374	6,667	13,714	38,256
Machinery leases	15,636	24,645	15,565	10,283	18,497	9,791
Building leases	4,906	10,264	1,685	3,165	3,685	6,090
Real estate taxes	12,935	14,434	5,313	7,514	16,295	21,220
Farm insurance	15,743	23,397	8,107	7,279	11,846	28,596
Utilities	9,608	17,346	6,236	4,420	7,705	12,851
Dues & professional fees	7,728	9,134	4,405	3,253	9,238	12,704
Organic certification	22	-	107	-	-	-
Miscellaneous	8,797	15,410	4,741	4,915	5,883	13,474
Total cash expense	938,304	1,356,078	609,593	389,036	886,799	1,477,867
Net cash farm income	170,297	10,817	87,263	88,640	256,552	397,583
<b>Inventory Changes</b>						
Prepays and supplies	-2,975	-44,535	-25,792	5,894	-786	47,573
Accounts receivable	23,000	65,729	1,550	13,592	17,436	19,544
Hedging accounts	2,845	-628	-1,060	-1,530	7,135	10,073
Other current assets	-318	-466	-	-853	100	-380
Crops and feed	-18,723	-34,185	1,124	-21,472	-60,093	19,980
Market livestock	3,168	230	-1,191	-	-	16,605
Breeding livestock	1,290	-902	440	-	-	6,767
Other assets	10,396	5,098	4,346	2,862	3,509	35,812
Accounts payable	-1,593	6,956	-1,938	9,883	152	-22,446
Accrued interest	-1,887	-1,980	-2,113	285	-3,574	-2,057
Total inventory change	15,204	-4,683	-24,634	8,661	-36,120	131,471
Net operating profit	185,501	6,134	62,628	97,301	220,431	529,054
<b>Depreciation</b>						
Machinery and equipment	-63,396	-81,333	-45,374	-30,968	-59,928	-100,573
Titled vehicles	-4,132	-7,619	-1,633	-1,707	-3,127	-6,806
Buildings and improvements	-9,424	-22,065	-3,779	-3,813	-9,404	-8,900
Total depreciation	-76,952	-111,018	-50,786	-36,489	-72,459	-116,279
Net farm income from operations	108,549	-104,884	11,842	60,812	147,972	412,775
Gain or loss on capital sales	43	-	-	50	-348	511
Net farm income	108,593	-104,884	11,842	60,862	147,624	413,286



**Inventory Changes**  
**2017 Moorhead Farm Business Management Annual Report**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	74	14	15	15	15	15
Net cash farm income	170,297	10,817	87,263	88,640	256,552	397,583
<b>Crops and Feed</b>						
Ending inventory	576,842	654,558	392,792	230,183	604,248	1,007,613
Beginning inventory	595,565	688,743	391,667	251,656	664,340	987,632
Inventory change	-18,723	-34,185	1,124	-21,472	-60,093	19,980
<b>Market Livestock</b>						
Ending inventory	14,299	3,177	1,371	-	-	66,204
Beginning inventory	11,130	2,946	2,561	-	-	49,599
Inventory change	3,168	230	-1,191	-	-	16,605
<b>Accts Receivable</b>						
Ending inventory	65,724	131,434	27,721	47,273	43,475	83,097
Beginning inventory	42,724	65,705	26,171	33,680	26,040	63,554
Inventory change	23,000	65,729	1,550	13,592	17,436	19,544
<b>Prepaid Expenses and Supplies</b>						
Ending inventory	102,022	95,393	36,865	56,983	94,006	226,421
Beginning inventory	104,997	139,927	62,657	51,088	94,793	178,848
Inventory change	-2,975	-44,535	-25,792	5,894	-786	47,573
<b>Hedging Activities</b>						
Ending inventory	11,741	479	1,033	2,049	19,032	35,360
Withdrawals	2,618	-	-	-	2,827	10,088
Beginning inventory	9,795	1,107	1,667	2,990	14,323	28,308
Deposits	1,719	-	427	589	400	7,067
Gain or loss	2,845	-628	-1,060	-1,530	7,135	10,073
<b>Other Current Assets</b>						
Ending inventory	920	970	-	927	2,502	203
Beginning inventory	1,238	1,436	-	1,780	2,402	583
Inventory change	-318	-466	-	-853	100	-380
<b>Breeding Livestock</b>						
Ending inventory	13,681	7,169	19,907	-	-	40,893
Capital sales	72	381	-	-	-	-
Beginning inventory	10,030	8,451	7,467	-	-	34,127
Capital purchases	2,432	-	12,000	-	-	-
Depreciation, capital adjust	1,290	-902	440	-	-	6,767
<b>Other Capital Assets</b>						
Ending inventory	320,754	253,173	92,173	91,947	362,050	799,922
Capital sales	1,819	-	-	-	-	8,974
Beginning inventory	287,729	248,075	70,475	81,701	311,843	723,907
Capital purchases	24,448	-	17,352	7,384	46,698	49,178
Depreciation, capital adjust	10,396	5,098	4,346	2,862	3,509	35,812
<b>Accounts Payable</b>						
Beginning inventory	33,172	52,613	54,304	14,524	14,449	31,265
Ending inventory	34,764	45,657	56,242	4,641	14,297	53,710
Inventory change	-1,593	6,956	-1,938	9,883	152	-22,446
<b>Accrued Interest</b>						
Beginning inventory	22,454	44,583	15,219	12,447	22,071	19,425
Ending inventory	24,341	46,563	17,332	12,162	25,645	21,483
Inventory change	-1,887	-1,980	-2,113	285	-3,574	-2,057
Total inventory change	15,204	-4,683	-24,634	8,661	-36,120	131,471
Net operating profit	185,501	6,134	62,628	97,301	220,431	529,054

**Depreciation**  
**2017 Moorhead Farm Business Management Annual Report**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	74	14	15	15	15	15
Net operating profit	185,501	6,134	62,628	97,301	220,431	529,054
<b>Machinery and Equipment</b>						
Ending inventory	661,650	777,525	460,331	316,732	628,500	1,132,885
Capital sales	7,138	14,933	2,917	2,725	10,434	5,200
Beginning inventory	644,082	831,375	455,132	306,928	610,076	1,029,385
Capital purchases	88,102	42,415	53,490	43,497	88,786	209,273
Depreciation, capital adjust.	-63,396	-81,333	-45,374	-30,968	-59,928	-100,573
<b>Titled Vehicles</b>						
Ending inventory	32,058	46,221	11,388	13,337	23,192	67,097
Capital sales	605	857	-	34	-	2,150
Beginning inventory	32,777	54,612	12,471	11,066	22,129	65,061
Capital purchases	4,019	86	550	4,012	4,191	10,992
Depreciation, capital adjust.	-4,132	-7,619	-1,633	-1,707	-3,127	-6,806
<b>Buildings and Improvements</b>						
Ending inventory	254,252	563,730	87,336	99,152	242,938	298,737
Capital sales	140	468	253	-	-	-
Beginning inventory	250,824	574,833	82,189	99,861	247,276	271,559
Capital purchases	12,992	11,430	9,180	3,104	5,066	36,078
Depreciation, capital adjust.	-9,424	-22,065	-3,779	-3,813	-9,404	-8,900
Total depreciation, capital adj.	-76,952	-111,018	-50,786	-36,489	-72,459	-116,279
Net farm income from operations	108,549	-104,884	11,842	60,812	147,972	412,775
Gain or loss on capital sales	43	-	-	50	-348	511
Net farm income	108,593	-104,884	11,842	60,862	147,624	413,286

**Profitability Measures**  
**2017 Moorhead Farm Business Management Annual Report**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	74	14	15	15	15	15

**Profitability (assets valued at cost)**

Net farm income from operations	108,549	-104,884	11,842	60,812	147,972	412,775
Rate of return on assets	2.6 %	-3.9 %	-1.0 %	3.0 %	4.0 %	7.0 %
Rate of return on equity	1.5 %	-12.5 %	-7.3 %	2.1 %	3.9 %	8.6 %
Operating profit margin	6.4 %	-9.6 %	-2.2 %	8.6 %	9.6 %	17.8 %
Asset turnover rate	40.2 %	40.1 %	46.5 %	34.4 %	41.5 %	39.3 %
Farm interest expense	47,652	73,599	29,492	24,865	39,593	72,439
Value of operator lbr and mgmt.	84,307	103,516	56,743	45,154	80,526	136,876
Return on farm assets	71,894	-134,801	-15,409	40,524	107,039	348,338
Average farm assets	2,793,700	3,493,114	1,502,744	1,368,167	2,679,576	4,971,530
Return on farm equity	24,242	-208,400	-44,901	15,658	67,446	275,899
Average farm equity	1,586,468	1,668,349	614,464	728,475	1,727,664	3,198,845
Value of farm production	1,123,168	1,400,610	698,234	470,155	1,111,439	1,953,899

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	74	14	15	15	15	15

**Profitability (assets valued at market)**

Net farm income from operations	146,656	-35,782	21,727	57,087	263,149	414,937
Rate of return on assets	2.6 %	-1.3 %	-0.3 %	1.6 %	5.9 %	4.7 %
Rate of return on equity	2.5 %	-4.6 %	-3.6 %	0.9 %	7.8 %	6.0 %
Operating profit margin	9.8 %	-4.7 %	-0.8 %	7.8 %	20.0 %	17.9 %
Asset turnover rate	27.0 %	27.0 %	33.2 %	20.1 %	29.4 %	26.3 %
Farm interest expense	47,652	73,599	29,492	24,865	39,593	72,439
Value of operator lbr and mgmt.	84,307	103,516	56,743	45,154	80,526	136,876
Return on farm assets	110,001	-65,699	-5,523	36,799	222,217	350,500
Average farm assets	4,155,410	5,192,003	2,103,998	2,335,891	3,777,790	7,436,475
Return on farm equity	62,349	-139,298	-35,015	11,933	182,623	278,061
Average farm equity	2,468,879	3,031,855	978,119	1,390,151	2,351,183	4,630,620
Value of farm production	1,123,168	1,400,610	698,234	470,155	1,111,439	1,953,899

**Liquidity & Repayment Capacity Measures**  
**2017 Moorhead Farm Business Management Annual Report**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	74	14	15	15	15	15
<b>Liquidity</b>						
Current ratio	1.51	0.98	1.10	1.36	2.02	2.04
Working capital	272,718	-16,664	43,337	91,791	392,020	833,817
Working capital to gross inc	24.1 %	-1.2 %	6.2 %	19.5 %	35.3 %	42.0 %
Current assets	806,472	810,487	457,603	347,664	777,760	1,639,112
Current liabilities	533,754	827,152	414,266	255,874	385,741	805,296
Gross revenues (accrual)	1,130,337	1,401,771	702,065	470,275	1,111,439	1,984,231
<b>Repayment capacity</b>						
Net farm income from operations	108,549	-104,884	11,842	60,812	147,972	412,775
Depreciation	76,952	111,018	50,786	36,489	72,459	116,279
Personal income	30,331	34,090	29,952	48,347	26,439	13,077
Family living/owner withdrawals	-85,330	-77,444	-54,256	-72,078	-96,967	-125,381
Cash discrepancy	-9	40	-	-7	0	-74
Payments on personal debt	-6,842	-8,450	-6,076	-4,741	-6,811	-8,237
Income taxes paid	-19,610	-5,259	-3,132	-9,726	-32,470	-46,506
Interest on term debt	32,270	49,493	21,564	19,774	23,587	48,079
Capital debt repayment capacity	136,321	-1,435	50,680	78,878	134,209	410,087
Scheduled term debt payments	-107,442	-157,712	-82,959	-52,245	-86,031	-161,612
Capital debt repayment margin	28,879	-159,148	-32,279	26,633	48,178	248,475
Cash replacement allowance	-54,258	-71,855	-22,717	-29,016	-51,889	-96,986
Replacement margin	-25,379	-231,003	-54,996	-2,383	-3,711	151,489
Term debt coverage ratio	1.27	-0.01	0.61	1.51	1.56	2.54
Replacement coverage ratio	0.84	-0.01	0.48	0.97	0.97	1.59

**Balance Sheet at Market Values**  
**2017 Moorhead Farm Business Management Annual Report**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	74	14	15	15	15	15
<b>Assets</b>						
<b>Current Farm Assets</b>						
Cash and checking balance	34,925	-75,522	-2,178	10,250	14,497	220,214
Prepaid expenses & supplies	102,022	95,393	36,865	56,983	94,006	226,421
Growing crops	41	-	-	-	-	203
Accounts receivable	65,724	131,434	27,721	47,273	43,475	83,097
Hedging accounts	11,741	479	1,033	2,049	19,032	35,360
Crops held for sale or feed	576,842	654,558	392,792	230,183	604,248	1,007,613
Crops under government loan	-	-	-	-	-	-
Market livestock held for sale	14,299	3,177	1,371	-	-	66,204
Other current assets	879	970	-	927	2,502	-
<b>Total current farm assets</b>	<b>806,472</b>	<b>810,487</b>	<b>457,603</b>	<b>347,664</b>	<b>777,760</b>	<b>1,639,112</b>
<b>Intermediate Farm Assets</b>						
Breeding livestock	14,145	8,769	20,607	100	-	40,893
Machinery and equipment	917,554	1,152,642	593,590	464,186	851,446	1,541,579
Titled vehicles	46,663	63,029	17,530	18,217	29,836	105,791
Other intermediate assets	403,799	298,343	69,063	121,207	412,324	1,111,029
<b>Total intermediate farm assets</b>	<b>1,382,161</b>	<b>1,522,783</b>	<b>700,790</b>	<b>603,710</b>	<b>1,293,606</b>	<b>2,799,293</b>
<b>Long Term Farm Assets</b>						
Farm land	1,616,895	1,952,587	781,996	1,254,793	1,425,087	2,692,389
Buildings and improvements	325,982	739,950	110,398	107,716	302,838	396,605
Other long-term assets	91,158	125,627	62,002	30,083	97,160	143,215
<b>Total long-term farm assets</b>	<b>2,034,034</b>	<b>2,818,164</b>	<b>954,396</b>	<b>1,392,593</b>	<b>1,825,086</b>	<b>3,232,209</b>
<b>Total Farm Assets</b>	<b>4,222,668</b>	<b>5,151,434</b>	<b>2,112,789</b>	<b>2,343,967</b>	<b>3,896,452</b>	<b>7,670,614</b>
<b>Total Nonfarm Assets</b>	<b>493,795</b>	<b>382,386</b>	<b>325,146</b>	<b>291,036</b>	<b>685,793</b>	<b>777,188</b>
<b>Total Assets</b>	<b>4,716,463</b>	<b>5,533,820</b>	<b>2,437,935</b>	<b>2,635,002</b>	<b>4,582,245</b>	<b>8,447,802</b>
<b>Liabilities</b>						
<b>Current Farm Liabilities</b>						
Accrued interest	24,341	46,563	17,332	12,162	25,645	21,483
Accounts payable	34,764	45,657	56,242	4,641	14,297	53,710
Current notes	395,290	614,968	281,012	205,334	275,487	614,291
Government crop loans	-	-	-	-	-	-
Principal due on term debt	79,359	119,962	59,680	33,736	70,311	115,812
<b>Total current farm liabilities</b>	<b>533,754</b>	<b>827,152</b>	<b>414,266</b>	<b>255,874</b>	<b>385,741</b>	<b>805,296</b>
<b>Total intermediate farm liab</b>	<b>152,238</b>	<b>188,816</b>	<b>192,468</b>	<b>60,376</b>	<b>131,690</b>	<b>190,280</b>
<b>Total long term farm liabilities</b>	<b>557,531</b>	<b>819,925</b>	<b>302,460</b>	<b>324,924</b>	<b>477,807</b>	<b>880,032</b>
<b>Total farm liabilities</b>	<b>1,243,523</b>	<b>1,835,892</b>	<b>909,195</b>	<b>641,174</b>	<b>995,238</b>	<b>1,875,607</b>
<b>Total nonfarm liabilities</b>	<b>104,244</b>	<b>110,366</b>	<b>80,958</b>	<b>49,732</b>	<b>126,482</b>	<b>154,092</b>
<b>Total liab</b> excluding deferreds	<b>1,347,767</b>	<b>1,946,258</b>	<b>990,152</b>	<b>690,906</b>	<b>1,121,720</b>	<b>2,029,699</b>
<b>Total deferred liabilities</b>	<b>508,514</b>	<b>347,736</b>	<b>247,236</b>	<b>318,881</b>	<b>522,444</b>	<b>1,095,554</b>
<b>Total liabilities</b>	<b>1,856,281</b>	<b>2,293,994</b>	<b>1,237,388</b>	<b>1,009,787</b>	<b>1,644,164</b>	<b>3,125,254</b>
<b>Retained earnings</b>	<b>1,842,624</b>	<b>1,740,581</b>	<b>777,174</b>	<b>884,325</b>	<b>2,075,387</b>	<b>3,728,848</b>
<b>Market valuation equity</b>	<b>1,017,558</b>	<b>1,499,245</b>	<b>423,373</b>	<b>740,891</b>	<b>862,694</b>	<b>1,593,700</b>
<b>Net worth (farm and nonfarm)</b>	<b>2,860,182</b>	<b>3,239,826</b>	<b>1,200,547</b>	<b>1,625,216</b>	<b>2,938,081</b>	<b>5,322,549</b>
<b>Net worth excluding deferreds</b>	<b>3,368,696</b>	<b>3,587,562</b>	<b>1,447,783</b>	<b>1,944,097</b>	<b>3,460,526</b>	<b>6,418,103</b>
<b>Net worth change</b>	<b>94,773</b>	<b>-55,947</b>	<b>-21</b>	<b>30,785</b>	<b>211,942</b>	<b>277,057</b>
<b>Percent net worth change</b>	<b>3 %</b>	<b>-2 %</b>	<b>0 %</b>	<b>2 %</b>	<b>8 %</b>	<b>5 %</b>
<b>Ratio Analysis</b>						
Current farm liabilities / assets	66 %	102 %	91 %	74 %	50 %	49 %
Intermediate farm liab. / assets	11 %	12 %	27 %	10 %	10 %	7 %
Long term farm liab. / assets	27 %	29 %	32 %	23 %	26 %	27 %
Total debt to asset ratio	39 %	41 %	51 %	38 %	36 %	37 %
Debt to assets excl deferreds	29 %	35 %	41 %	26 %	24 %	24 %

**Balance Sheet at Cost Values**  
**2017 Moorhead Farm Business Management Annual Report**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	74	14	15	15	15	15
<b>Assets</b>						
<b>Current Farm Assets</b>						
Cash and checking balance	34,925	-75,522	-2,178	10,250	14,497	220,214
Prepaid expenses & supplies	102,022	95,393	36,865	56,983	94,006	226,421
Growing crops	41	-	-	-	-	203
Accounts receivable	65,724	131,434	27,721	47,273	43,475	83,097
Hedging accounts	11,741	479	1,033	2,049	19,032	35,360
Crops held for sale or feed	576,842	654,558	392,792	230,183	604,248	1,007,613
Crops under government loan	-	-	-	-	-	-
Market livestock held for sale	14,299	3,177	1,371	-	-	66,204
Other current assets	879	970	-	927	2,502	-
Total current farm assets	806,472	810,487	457,603	347,664	777,760	1,639,112
<b>Intermediate Farm Assets</b>						
Breeding livestock	13,681	7,169	19,907	-	-	40,893
Machinery and equipment	661,650	777,525	460,331	316,732	628,500	1,132,885
Titled vehicles	32,058	46,221	11,388	13,337	23,192	67,097
Other intermediate assets	265,128	207,891	61,207	75,821	292,072	684,836
Total intermediate farm assets	972,517	1,038,805	552,832	405,889	943,764	1,925,712
<b>Long Term Farm Assets</b>						
Farm land	750,485	969,158	380,460	509,309	701,257	1,206,820
Buildings and improvements	254,252	563,730	87,336	99,152	242,938	298,737
Other long-term assets	55,626	45,282	30,966	16,126	69,979	115,085
Total long-term farm assets	1,060,363	1,578,170	498,762	624,587	1,014,174	1,620,643
Total Farm Assets	2,839,351	3,427,462	1,509,197	1,378,140	2,735,698	5,185,467
Total Nonfarm Assets	351,039	259,378	258,129	197,090	461,408	573,081
Total Assets	3,190,391	3,686,840	1,767,326	1,575,231	3,197,107	5,758,548
<b>Liabilities</b>						
<b>Current Farm Liabilities</b>						
Accrued interest	24,341	46,563	17,332	12,162	25,645	21,483
Accounts payable	34,764	45,657	56,242	4,641	14,297	53,710
Current notes	395,290	614,968	281,012	205,334	275,487	614,291
Government crop loans	-	-	-	-	-	-
Principal due on term debt	79,359	119,962	59,680	33,736	70,311	115,812
Total current farm liabilities	533,754	827,152	414,266	255,874	385,741	805,296
Total intermediate farm liab	152,238	188,816	192,468	60,376	131,690	190,280
Total long term farm liabilities	557,531	819,925	302,460	324,924	477,807	880,032
Total farm liabilities	1,243,523	1,835,892	909,195	641,174	995,238	1,875,607
Total nonfarm liabilities	104,244	110,366	80,958	49,732	126,482	154,092
Total liabilities	1,347,767	1,946,258	990,152	690,906	1,121,720	2,029,699
Net worth (farm and nonfarm)	1,842,624	1,740,581	777,174	884,325	2,075,387	3,728,848
Net worth change	35,549	-151,067	-21,888	20,188	61,745	256,325
Percent net worth change	2 %	-8 %	-3 %	2 %	3 %	7 %
<b>Ratio Analysis</b>						
Current farm liabilities / assets	66 %	102 %	91 %	74 %	50 %	49 %
Intermediate farm liab. / assets	16 %	18 %	35 %	15 %	14 %	10 %
Long term farm liab. / assets	53 %	52 %	61 %	52 %	47 %	54 %
Total debt to asset ratio	42 %	53 %	56 %	44 %	35 %	35 %

**Statement Of Cash Flows**  
**2017 Moorhead Farm Business Management Annual Report**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	74	14	15	15	15	15
Beginning cash (farm & nonfarm)	58,800	28,443	14,522	22,731	64,316	161,965
<b>Cash Provided By Operating Activities</b>						
Gross cash farm income	1,108,602	1,366,895	696,856	477,676	1,143,351	1,875,450
Total cash farm expense	-938,304	-1,356,078	-609,593	-389,036	-886,799	-1,477,867
Net cash from hedging transactions	899	-	-427	-589	2,427	3,022
Cash provided by operating	171,196	10,817	86,836	88,052	258,979	400,605
<b>Cash Provided By Investing Activities</b>						
Sale of breeding livestock	72	381	-	-	-	-
Sale of machinery & equipment	7,058	14,933	2,917	2,775	10,085	5,106
Sale of titled vehicles	605	857	-	34	-	2,150
Sale of farm land	8,679	-	-	-	41,433	1,382
Sale of farm buildings	140	468	253	-	-	-
Sale of other farm assets	1,819	-	-	-	-	8,974
Sale of nonfarm assets	9,059	3,393	22,333	8,191	5,433	5,567
Purchase of breeding livestock	-2,432	-	-12,000	-	-	-
Purchase of machinery & equip.	-88,102	-42,415	-53,490	-43,497	-88,786	-209,273
Purchase of titled vehicles	-4,019	-86	-550	-4,012	-4,191	-10,992
Purchase of farm land	-50,466	-42,853	-	-	-169,768	-39,200
Purchase of farm buildings	-12,992	-11,430	-9,180	-3,104	-5,066	-36,078
Purchase of other farm assets	-24,448	-	-17,352	-7,384	-46,698	-49,178
Purchase of nonfarm assets	-25,714	-3,272	-48,134	-6,262	-12,614	-56,789
Cash provided by investing	-180,740	-80,024	-115,203	-53,260	-270,171	-378,331
<b>Cash Provided By Financing Activities</b>						
Money borrowed	561,178	613,689	427,831	226,922	444,906	1,096,040
Principal payments	-487,555	-591,810	-366,679	-218,182	-373,699	-894,358
Personal income	30,331	34,090	29,952	48,347	26,439	13,077
Family living/owner withdrawals	-85,330	-77,444	-54,256	-72,078	-96,967	-125,381
Income and social security tax	-20,879	-4,038	-3,861	-9,294	-38,204	-47,876
Capital contributions	-	-	-	-	-	-
Capital distributions	-3,041	-	-	-	-15,000	-
Dividends paid	-	-	-	-	-	-
Cash gifts and inheritances	7,997	1,071	1,291	163	28,792	8,205
Gifts given	-4,416	-	-	-12,533	-1,774	-7,477
Other cash flows	-	-	-	-	-	-
Cash provided by financing	-1,715	-24,441	34,278	-36,655	-25,505	42,231
Net change in cash balance	-11,260	-93,648	5,912	-1,863	-36,698	64,505
Ending cash (farm & nonfarm)	47,532	-65,164	20,434	20,861	27,619	226,396
Discrepancy	9	-40	-	7	0	74

**Financial Standards Measures**  
**2017 Moorhead Farm Business Management Annual Report**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	74	14	15	15	15	15
<b>Liquidity</b>						
Current ratio	1.51	0.98	1.10	1.36	2.02	2.04
Working capital	272,718	-16,664	43,337	91,791	392,020	833,817
Working capital to gross inc	24.1 %	-1.2 %	6.2 %	19.5 %	35.3 %	42.0 %
<b>Solvency (market)</b>						
Farm debt to asset ratio	41 %	42 %	54 %	40 %	38 %	38 %
Farm equity to asset ratio	59 %	58 %	46 %	60 %	62 %	62 %
Farm debt to equity ratio	0.69	0.72	1.18	0.68	0.61	0.62
<b>Profitability (cost)</b>						
Rate of return on farm assets	2.6 %	-3.9 %	-1.0 %	3.0 %	4.0 %	7.0 %
Rate of return on farm equity	1.5 %	-12.5 %	-7.3 %	2.1 %	3.9 %	8.6 %
Operating profit margin	6.4 %	-9.6 %	-2.2 %	8.6 %	9.6 %	17.8 %
Net farm income	108,593	-104,884	11,842	60,862	147,624	413,286
EBITDA	233,153	79,733	92,120	122,166	260,025	601,493
<b>Repayment Capacity</b>						
Capital debt repayment capacity	136,321	-1,435	50,680	78,878	134,209	410,087
Capital debt repayment margin	28,879	-159,148	-32,279	26,633	48,178	248,475
Replacement margin	-25,379	-231,003	-54,996	-2,383	-3,711	151,489
Term debt coverage ratio	1.27	-0.01	0.61	1.51	1.56	2.54
Replacement coverage ratio	0.84	-0.01	0.48	0.97	0.97	1.59
<b>Efficiency</b>						
Asset turnover rate (cost)	40.2 %	40.1 %	46.5 %	34.4 %	41.5 %	39.3 %
Operating expense ratio	79.4 %	94.3 %	86.9 %	74.0 %	76.6 %	69.7 %
Depreciation expense ratio	6.8 %	7.9 %	7.2 %	7.8 %	6.5 %	5.9 %
Interest expense ratio	4.2 %	5.3 %	4.2 %	5.3 %	3.6 %	3.7 %
Net farm income ratio	9.6 %	-7.5 %	1.7 %	12.9 %	13.3 %	20.8 %



**Crop Production and Marketing Summary**  
**2017 Moorhead Farm Business Management Annual Report**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	74	14	15	15	15	15
<b>Acreage Summary</b>						
Total acres owned	503	635	227	425	467	771
Total crop acres	1,965	2,658	1,440	990	2,028	2,757
Crop acres owned	450	628	219	368	423	622
Crop acres cash rented	1,484	2,006	1,176	570	1,567	2,136
Crop acres share rented	32	24	45	51	38	-
Total pasture acres	31	4	8	-	-	140
Percent crop acres owned	23 %	24 %	15 %	37 %	21 %	23 %
Mach invest/crop acre cost	349	322	326	327	317	416
Mach invest/crop acre market	487	465	424	486	433	578
<b>Average Price Received (Cash Sales Only)</b>						
Soybeans per bushel	8.99	8.85	9.10	8.74	9.30	8.97
Wheat, Spring per bushel	5.57	5.63	5.62	5.48	5.48	5.61
Corn per bushel	3.00	2.90	3.09	2.79	3.06	3.09
Soybeans Seed per bushel	10.66	-	-	-	-	-
Soybeans, Food per bushel	14.41	-	-	-	-	-
<b>Average Yield Per Acre</b>						
Soybeans (bushel)	36.59	36.72	32.46	34.01	38.18	38.68
Corn (bushel)	168.87	172.77	158.13	164.99	173.94	171.03
Wheat, Spring (bushel)	73.29	74.71	72.37	71.19	75.24	72.30
Sugar Beets (ton)	31.42	30.06	29.85	32.80	32.18	31.68
Soybeans Seed (bushel)	40.39	38.45	-	-	41.29	-
CRP (\$)	60.79	28.47	-	99.15	-	-
Rented Out (\$)	219.64	-	-	-	-	206.75
Soybeans, Food (bushel)	27.81	-	-	-	-	-
Barley (bushel)	83.50	-	-	-	-	-

**Household and Personal Expenses**  
**2017 Moorhead Farm Business Management Annual Report**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>
Number of farms	7
Average family size	3.4
<b>Family Living Expenses</b>	
Food and meals expense	22,274
Medical care	7,174
Health insurance	7,404
Cash donations	3,850
Household supplies	4,499
Clothing	7,356
Personal care	2,607
Child / Dependent care	-
Alimony and child support	-
Gifts	4,671
Education	7,070
Recreation	8,727
Utilities (household share)	4,793
Personal vehicle operating exp	4,843
Household real estate taxes	1,354
Dwelling rent	1,178
Household repairs	2,942
Personal interest	3,825
Disability / Long term care ins	966
Life insurance payments	1,837
Personal property insurance	505
Miscellaneous	6,070
Total cash family living expense	103,946
Family living from the farm	-
Total family living	103,946
<b>Other Nonfarm Expenditures</b>	
Income taxes	30,746
Furnishing & appliance purchases	169
Nonfarm vehicle purchases	3,685
Nonfarm real estate purchases	4,004
Other nonfarm capital purchases	-
Nonfarm savings & investments	9,259
Total other nonfarm expenditures	47,862
Total cash family living investment & nonfarm capital purch	151,808

**Operator and Labor Information**  
**2017 Moorhead Farm Business Management Annual Report**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	74	14	15	15	15	15
<b>Operator Information</b>						
Average number of operators	1.1	1.3	0.9	0.8	1.0	1.3
Average age of operators	47.8	50.9	38.5	45.1	49.8	53.5
Average number of years farming	24.9	25.9	17.3	20.9	27.5	31.6
<b>Results Per Operator</b>						
Working capital	257,774	-12,961	49,775	108,414	378,641	658,276
Total assets (market)	4,458,018	4,304,082	2,800,078	3,112,208	4,425,865	6,669,318
Total liabilities	1,754,564	1,784,217	1,421,196	1,192,662	1,588,053	2,467,306
Net worth (market)	2,703,454	2,519,865	1,378,882	1,919,546	2,837,812	4,202,012
Net worth excl deferred liabs	3,184,104	2,790,326	1,662,844	2,296,177	3,342,427	5,066,923
Gross farm income	1,068,399	1,090,266	806,354	555,443	1,073,508	1,566,498
Total farm expense	965,798	1,171,843	792,753	483,617	930,586	1,240,623
Net farm income from operations	102,601	-81,576	13,601	71,826	142,922	325,875
Net nonfarm income	28,669	26,515	34,401	57,103	25,537	10,324
Family living & tax withdrawals	99,198	64,293	65,912	96,627	125,020	135,758
Total acres owned	475.8	494.3	261.2	502.2	450.9	608.6
Total crop acres	1,857.7	2,067.5	1,654.3	1,168.7	1,958.6	2,177.0
Crop acres owned	425.1	488.8	251.5	434.9	408.6	490.9
Crop acres cash rented	1,402.7	1,560.2	1,351.1	673.4	1,513.2	1,686.1
Crop acres share rented	30.0	18.6	51.7	60.4	36.8	-
Total pasture acres	29.1	3.3	8.8	-	-	110.5
<b>Labor Analysis</b>						
Number of farms	74	14	15	15	15	15
Total unpaid labor hours	1,585	1,836	1,427	1,277	1,537	1,867
Total hired labor hours	3,700	9,452	1,283	847	2,314	4,989
Total labor hours per farm	5,285	11,288	2,709	2,123	3,850	6,856
Unpaid hours per operator	1,498	1,428	1,639	1,508	1,484	1,474
Value of farm production / hour	212.51	124.08	257.71	221.42	288.67	285.00
Net farm income / unpaid hour	68.48	-57.14	8.30	47.63	96.29	221.13
Average hourly hired labor wage	22.13	21.42	17.32	17.96	22.28	25.25
<b>Partnerships &amp; LLCs</b>						
Number of farms	6	2	1	-	1	2
Number of operators	2.1	-	-	-	-	-
Owner withdrawals per farm	-	-	-	-	-	-
Withdrawals per operator	-	-	-	-	-	-

**Nonfarm Summary**  
**2017 Moorhead Farm Business Management Annual Report**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	74	14	15	15	15	15
<b>Nonfarm Income</b>						
Personal wages & salary	20,107	20,426	14,883	46,654	10,465	8,129
Net nonfarm business income	1,234	-	5,287	390	-	412
Personal interest income	235	2	-	28	160	970
Personal cash dividends	29	-	-	5	136	-
Tax refunds	513	1,268	751	419	17	162
Other nonfarm income	8,213	12,394	9,032	851	15,661	3,404
Total nonfarm income	30,331	34,090	29,952	48,347	26,439	13,077
Gifts and inheritances	7,997	1,071	1,291	163	28,792	8,205
<b>Nonfarm Assets (market)</b>						
Checking & savings	12,607	10,358	22,612	10,611	13,122	6,182
Stocks & bonds	46,549	116	25,321	12,836	179,479	11,897
Other current assets	8,482	886	667	3,851	33,987	2,512
Furniture & appliances	12,822	13,043	12,734	10,060	12,900	15,390
Nonfarm vehicles	27,043	16,836	21,850	31,141	17,848	46,857
Cash value of life ins.	15,813	26,808	8,271	20,447	15,431	8,843
Retirement accounts	141,546	114,333	103,859	99,498	184,788	203,438
Other intermediate assets	4,235	4,644	3,679	1,827	6,680	4,372
Nonfarm real estate	189,584	194,734	123,720	93,372	178,146	358,292
Personal bus. investment	18,313	-	-	-	9,425	80,918
Other long term assets	16,801	629	2,433	7,392	33,989	38,486
Total nonfarm assets	493,795	382,386	325,146	291,036	685,793	777,188
<b>Nonfarm Liabilities</b>						
Accrued interest	246	344	216	63	241	373
Accounts payable	386	-	133	320	1,000	454
Current notes	410	-	1,060	863	-	100
Princ due on term debt	7,424	8,195	6,174	4,730	7,627	10,444
Total current liabilities	22,179	12,146	11,741	12,465	33,010	40,867
Intermediate liabilities	6,459	11,452	9,185	1,984	5,436	4,571
Long term liabilities	75,606	86,768	60,032	35,284	88,037	108,655
Total nonfarm liabilities	104,244	110,366	80,958	49,732	126,482	154,092
Nonfarm net worth	389,551	272,020	244,188	241,304	559,311	623,096
Nonfarm debt to asset ratio	21 %	29 %	25 %	17 %	18 %	20 %

**Financial Summary**  
**2017 Moorhead Farm Business Management Annual Report**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	74	14	15	15	15	15
<b>Income Statement</b>						
Gross cash farm income	1,108,602	1,366,895	696,856	477,676	1,143,351	1,875,450
Total cash farm expense	938,304	1,356,078	609,593	389,036	886,799	1,477,867
Net cash farm income	170,297	10,817	87,263	88,640	256,552	397,583
Inventory change	15,204	-4,683	-24,634	8,661	-36,120	131,471
Depreciation	-76,952	-111,018	-50,786	-36,489	-72,459	-116,279
Net farm income from operations	108,549	-104,884	11,842	60,812	147,972	412,775
Gain or loss on capital sales	43	-	-	50	-348	511
Average net farm income	108,593	-104,884	11,842	60,862	147,624	413,286
Median net farm income	63,669	-51,302	13,308	62,145	148,129	387,123
<b>Profitability (cost)</b>						
Rate of return on assets	2.6 %	-3.9 %	-1.0 %	3.0 %	4.0 %	7.0 %
Rate of return on equity	1.5 %	-12.5 %	-7.3 %	2.1 %	3.9 %	8.6 %
Operating profit margin	6.4 %	-9.6 %	-2.2 %	8.6 %	9.6 %	17.8 %
Asset turnover rate	40.2 %	40.1 %	46.5 %	34.4 %	41.5 %	39.3 %
<b>Profitability (market)</b>						
Rate of return on assets	2.6 %	-1.3 %	-0.3 %	1.6 %	5.9 %	4.7 %
Rate of return on equity	2.5 %	-4.6 %	-3.6 %	0.9 %	7.8 %	6.0 %
Operating profit margin	9.8 %	-4.7 %	-0.8 %	7.8 %	20.0 %	17.9 %
Asset turnover rate	27.0 %	27.0 %	33.2 %	20.1 %	29.4 %	26.3 %
<b>Liquidity &amp; Repayment (end of year)</b>						
Current assets	806,472	810,487	457,603	347,664	777,760	1,639,112
Current liabilities	533,754	827,152	414,266	255,874	385,741	805,296
Current ratio	1.51	0.98	1.10	1.36	2.02	2.04
Working capital	272,718	-16,664	43,337	91,791	392,020	833,817
Change in working capital	-71,884	-180,679	-75,949	-12,475	-75,699	-21,871
Working capital to gross inc	24.1 %	-1.2 %	6.2 %	19.5 %	35.3 %	42.0 %
Term debt coverage ratio	1.27	-0.01	0.61	1.51	1.56	2.54
Replacement coverage ratio	0.84	-0.01	0.48	0.97	0.97	1.59
Term debt to EBITDA	3.01	13.33	5.41	3.22	1.99	1.76
<b>Solvency (end of year at cost)</b>						
Number of farms	74	14	15	15	15	15
Total assets	3,190,391	3,686,840	1,767,326	1,575,231	3,197,107	5,758,548
Total liabilities	1,347,767	1,946,258	990,152	690,906	1,121,720	2,029,699
Net worth	1,842,624	1,740,581	777,174	884,325	2,075,387	3,728,848
Net worth change	35,549	-151,067	-21,888	20,188	61,745	256,325
Farm debt to asset ratio	44 %	54 %	60 %	47 %	36 %	36 %
Total debt to asset ratio	42 %	53 %	56 %	44 %	35 %	35 %
Change in earned net worth %	2 %	-8 %	-3 %	2 %	3 %	7 %
<b>Solvency (end of year at market)</b>						
Number of farms	74	14	15	15	15	15
Total assets	4,716,463	5,533,820	2,437,935	2,635,002	4,582,245	8,447,802
Total liabilities	1,856,281	2,293,994	1,237,388	1,009,787	1,644,164	3,125,254
Net worth	2,860,182	3,239,826	1,200,547	1,625,216	2,938,081	5,322,549
Total net worth change	94,773	-55,947	-21	30,785	211,942	277,057
Farm debt to asset ratio	41 %	42 %	54 %	40 %	38 %	38 %
Total debt to asset ratio	39 %	41 %	51 %	38 %	36 %	37 %
Change in total net worth %	3 %	-2 %	0 %	2 %	8 %	5 %
<b>Nonfarm Information</b>						
Net nonfarm income	30,331	34,090	29,952	48,347	26,439	13,077
Farms reporting living expenses	7	2	-	2	1	2
Total family living expense	103,946	-	-	-	-	-
Total living, invest, cap. purch	151,808	-	-	-	-	-
<b>Crop Acres</b>						
Total crop acres	1,965	2,658	1,440	990	2,028	2,757
Total crop acres owned	450	628	219	368	423	622
Total crop acres cash rented	1,484	2,006	1,176	570	1,567	2,136
Total crop acres share rented	32	24	45	51	38	-
Machinery value per crop acre	487	465	424	486	433	578

**Summary Farm Income Statement**  
**2017 Moorhead Farm Business Management Annual Report**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	74	14	15	15	15	15
Crop sales	973,513	1,199,146	615,867	421,310	1,037,979	1,608,305
Crop inventory change	-18,723	-34,185	1,124	-21,472	-60,093	19,980
Gross crop income	954,790	1,164,960	616,991	399,838	977,886	1,628,286
Livestock sales	11,754	2,802	8,048	-	-	47,322
Livestock inventory change	3,168	230	-1,191	-	-	16,605
Gross livestock income	14,922	3,032	6,857	-	-	63,927
Government payments	21,278	20,005	11,390	11,361	17,198	46,351
Other cash farm income	102,057	144,943	61,551	45,005	88,174	173,471
Change in accounts receivable	23,000	65,729	1,550	13,592	17,436	19,544
Gain or loss on hedging accounts	2,845	-628	-1,060	-1,530	7,135	10,073
Change in other assets	10,155	4,632	4,346	2,008	3,610	35,812
Gain or loss on breeding lvst	1,290	-902	440	-	-	6,767
Gross farm income	1,130,337	1,401,771	702,065	470,275	1,111,439	1,984,231
Cash operating expenses	892,539	1,284,459	582,214	363,886	850,780	1,407,485
Change in prepaids and supplies	2,975	44,535	25,792	-5,894	786	-47,573
Change in growing crops	77	-	-	-	-	380
Change in accounts payable	1,593	-6,956	1,938	-9,883	-152	22,446
Depreciation	76,952	111,018	50,786	36,489	72,459	116,279
Total operating expense	974,136	1,433,056	660,732	384,597	923,873	1,499,017
Interest paid	45,765	71,619	27,379	25,150	36,019	70,382
Change in accrued interest	1,887	1,980	2,113	-285	3,574	2,057
Total interest expense	47,652	73,599	29,492	24,865	39,593	72,439
Total expenses	1,021,788	1,506,655	690,224	409,463	963,466	1,571,456
Net farm income from operations	108,549	-104,884	11,842	60,812	147,972	412,775
Gain or loss on capital sales	43	-	-	50	-348	511
Net farm income	108,593	-104,884	11,842	60,862	147,624	413,286

## Per Operator Information

### Moorhead Farm Business Management Program - Northland College

	<u>5-yr Average</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
<b>Number of Farms</b>	66.6	74	68	64	62	65
<b>Operator Information</b>						
Ave Age of Operator	47.4	47.8	47.7	47.3	47.7	46.6
Ave Years Farming	24.4	24.9	24.6	24.7	24.9	23.1
Net Farm Income / Op	81,216	102,601	157,760	103,023	14,037	28,659
Net Non-farm Income	29,102	28,669	30,037	30,269	27,034	29,503
Family Living + Income Taxes	116,804	99,198	107,588	108,628	128,780	139,827
<b>Crop Acres per Operator</b>						
Total Crop Acres	1,815.8	1,857.7	1,836.1	1,850.8	1,794.3	1,740.0
Crop Acres Owned	437.6	425.1	405.5	404.1	483.6	469.5
Crop Acres Cash Rented	1,362.0	1,402.7	1,392.8	1,399.5	1,333.4	1,281.8
Crop Acres Share Rented	43.9	30.0	37.8	47.2	51.2	53.1
<b>Labor Analysis</b>						
Total labor Hours per farm	4,176	5,285	4,016	3,889	4,005	3,685
Value of farm prod/hour	250.72	212.51	262.69	272.56	239.78	266.06
Net farm Income / unpaid hour	51.96	68.48	99.13	64.55	9.00	18.64

**CROP**

**DATA**



**Crop Enterprise Analysis**  
**2017 Moorhead Farm Business Management Annual Report**  
**(Farms Sorted By Return to Overhead)**

**Corn on Owned Land**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	27	5	6	6
Acres	291.36	206.50	431.33	245.17
Yield per acre (bu.)	171.13	164.45	173.97	171.86
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	2.94	2.78	2.92	2.95
Total product return per acre	502.65	457.04	508.05	506.79
Hedging gains/losses per acre	2.02	-	-	10.81
Crop insurance per acre	7.25	3.23	6.30	23.79
Other crop income per acre	2.97	0.09	3.56	3.35
Gross return per acre	514.89	460.36	517.91	544.74
<b>Direct Expenses</b>				
Seed and plants	94.28	102.60	101.32	78.21
Fertilizer	90.89	97.21	92.05	78.27
Crop chemicals	32.42	27.45	34.69	20.22
Crop insurance	22.82	23.10	26.43	18.03
Drying expense	6.61	7.58	4.90	5.98
Storage	0.65	1.88	0.05	0.00
Fuel & oil	18.86	20.45	14.23	22.28
Repairs	33.78	42.28	24.03	39.73
Custom hire	4.55	4.33	4.80	3.03
Hired labor	1.57	-	-	8.38
Machinery leases	1.65	6.73	-	-
Marketing	0.59	3.58	0.02	0.20
Operating interest	12.06	10.39	17.33	3.75
Miscellaneous	7.32	0.67	15.08	0.43
Total direct expenses per acre	328.04	348.26	334.92	278.51
Return over direct exp per acre	186.85	112.10	182.98	266.23
<b>Overhead Expenses</b>				
Hired labor	32.91	9.51	45.50	35.69
Machinery leases	7.21	7.90	5.26	16.65
Building leases	2.78	1.02	2.64	4.57
RE & pers. property taxes	25.55	32.00	22.25	34.40
Farm insurance	7.68	6.45	5.85	7.66
Utilities	6.75	5.45	5.81	5.08
Dues & professional fees	4.52	4.19	3.78	5.16
Interest	50.83	100.07	29.55	53.30
Mach & bldg depreciation	46.45	32.43	44.85	49.70
Miscellaneous	4.82	3.91	4.90	3.36
Total overhead expenses per acre	189.50	202.93	170.39	215.56
Total dir & ovhd expenses per acre	517.54	551.20	505.32	494.07
Net return per acre	-2.65	-90.84	12.59	50.67
Government payments	7.57	7.22	11.31	4.68
Net return with govt pmts	4.92	-83.62	23.90	55.35
Labor & management charge	43.33	55.04	36.14	43.63
Net return over lbr & mgt	-38.41	-138.65	-12.24	11.72
<b>Cost of Production</b>				
Total direct expense per bu.	1.92	2.12	1.93	1.62
Total dir & ovhd exp per bu.	3.02	3.35	2.90	2.87
Less govt & other income	2.91	3.29	2.78	2.63
With labor & management	3.16	3.62	2.99	2.88
Net value per unit	2.95	2.78	2.92	3.01
Machinery cost per acre	107.79	118.77	80.43	124.99
Est. labor hours per acre	2.75	2.33	3.13	2.70

**Crop Enterprise Analysis**  
**2017 Moorhead Farm Business Management Annual Report**  
**(Farms Sorted By Return to Overhead)**

**Corn on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	40	8	8	8
Acres	460.64	290.22	720.53	601.20
Yield per acre (bu.)	168.11	155.33	171.81	167.99
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	2.99	2.96	2.94	3.00
Total product return per acre	502.20	459.28	505.37	504.45
Hedging gains/losses per acre	2.21	-	-	8.46
Crop insurance per acre	9.47	14.28	4.95	21.03
Other crop income per acre	2.51	4.54	2.53	2.90
Gross return per acre	516.38	478.09	512.84	536.85
<b>Direct Expenses</b>				
Seed and plants	90.66	99.48	96.06	72.37
Fertilizer	93.21	94.60	92.69	83.57
Crop chemicals	31.74	31.74	31.80	31.05
Crop insurance	22.23	24.10	24.80	16.36
Drying expense	6.21	10.49	4.86	5.92
Storage	0.51	1.06	0.20	0.01
Fuel & oil	20.13	19.32	16.38	24.65
Repairs	34.88	41.22	28.47	40.44
Custom hire	5.76	7.08	5.66	2.91
Hired labor	2.63	-	-	7.48
Land rent	127.14	149.66	137.74	110.19
Machinery leases	1.67	10.33	-	-
Utilities	0.30	2.40	-	-
Marketing	0.32	0.49	0.00	0.68
Operating interest	10.10	14.15	12.99	4.42
Miscellaneous	4.52	3.18	7.58	1.27
Total direct expenses per acre	452.02	509.31	459.23	401.32
Return over direct exp per acre	64.36	-31.22	53.61	135.53
<b>Overhead Expenses</b>				
Hired labor	23.11	11.66	26.93	28.77
Machinery leases	9.07	3.98	12.18	12.62
Building leases	2.83	6.90	0.18	3.97
Farm insurance	7.44	11.56	5.33	9.29
Utilities	5.62	4.76	5.91	5.81
Dues & professional fees	4.02	4.38	3.72	5.36
Interest	4.42	7.26	3.26	2.87
Mach & bldg depreciation	46.72	44.59	47.68	46.66
Miscellaneous	4.80	3.74	2.88	6.49
Total overhead expenses per acre	108.02	98.83	108.07	121.83
Total dir & ovhd expenses per acre	560.04	608.14	567.31	523.15
Net return per acre	-43.66	-130.05	-54.46	13.70
Government payments	6.11	6.94	7.16	4.91
Net return with govt pmts	-37.55	-123.11	-47.31	18.61
Labor & management charge	47.43	56.61	41.36	41.80
Net return over lbr & mgt	-84.98	-179.73	-88.67	-23.19
<b>Cost of Production</b>				
Total direct expense per bu.	2.69	3.28	2.67	2.39
Total dir & ovhd exp per bu.	3.33	3.92	3.30	3.11
Less govt & other income	3.21	3.75	3.22	2.89
With labor & management	3.49	4.11	3.46	3.14
Net value per unit	3.00	2.96	2.94	3.05
Machinery cost per acre	115.60	130.06	103.26	120.88
Est. labor hours per acre	2.45	2.55	2.49	2.54

**Crop Enterprise Analysis**  
**2017 Moorhead Farm Business Management Annual Report**  
**(Farms Sorted By Return to Overhead)**

**Soybeans on Owned Land**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	41	8	8	9
Acres	297.58	282.81	287.63	256.00
Yield per acre (bu.)	36.65	28.88	38.66	40.34
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	8.99	8.91	8.94	9.02
Total product return per acre	329.57	257.21	345.75	363.81
Hedging gains/losses per acre	2.04	-	-	10.82
Crop insurance per acre	16.92	18.51	10.52	26.20
Other crop income per acre	3.43	4.42	4.48	3.08
Gross return per acre	351.96	280.14	360.76	403.91
<b>Direct Expenses</b>				
Seed and plants	63.54	63.14	63.14	53.93
Fertilizer	15.35	14.86	21.06	13.05
Crop chemicals	35.88	37.55	35.70	28.25
Crop insurance	19.98	20.91	19.96	17.14
Fuel & oil	10.86	12.45	12.17	12.45
Repairs	21.86	24.88	25.95	25.41
Custom hire	3.37	6.42	5.09	1.12
Hired labor	0.10	0.55	0.00	-
Machinery leases	0.16	0.72	-	0.12
Marketing	0.17	0.61	-	0.27
Operating interest	6.17	5.88	7.31	4.61
Miscellaneous	5.58	4.26	4.05	1.98
Total direct expenses per acre	183.02	192.24	194.45	158.33
Return over direct exp per acre	168.94	87.91	166.30	245.57
<b>Overhead Expenses</b>				
Hired labor	20.17	15.79	17.64	23.87
Machinery leases	3.26	1.47	3.35	2.43
Building leases	1.83	0.39	0.89	3.39
RE & pers. property taxes	25.18	22.42	24.08	33.23
Farm insurance	7.19	8.26	9.95	6.63
Utilities	3.74	4.93	4.06	3.21
Dues & professional fees	3.88	3.53	4.31	5.31
Interest	45.84	53.02	30.81	59.74
Mach & bldg depreciation	27.86	32.75	29.45	31.05
Miscellaneous	2.51	3.21	2.06	2.95
Total overhead expenses per acre	141.47	145.77	126.60	171.83
Total dir & ovhd expenses per acre	324.49	338.00	321.05	330.16
Net return per acre	27.48	-57.86	39.70	73.75
Government payments	10.50	17.77	13.12	6.77
Net return with govt pmts	37.98	-40.09	52.82	80.52
Labor & management charge	28.38	32.49	31.60	28.86
Net return over lbr & mgt	9.59	-72.57	21.22	51.65
<b>Cost of Production</b>				
Total direct expense per bu.	4.99	6.66	5.03	3.92
Total dir & ovhd exp per bu.	8.85	11.70	8.30	8.18
Less govt & other income	7.96	10.29	7.58	7.02
With labor & management	8.73	11.42	8.39	7.74
Net value per unit	9.05	8.91	8.94	9.29
Machinery cost per acre	64.32	75.91	73.71	68.20
Est. labor hours per acre	1.67	1.74	1.77	1.65

**Crop Enterprise Analysis**  
**2017 Moorhead Farm Business Management Annual Report**  
**(Farms Sorted By Return to Overhead)**

**Soybeans on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	61	12	12	13
Acres	721.63	813.17	554.49	393.06
Yield per acre (bu.)	36.59	30.52	32.16	41.68
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	8.99	9.00	8.97	8.90
Total product return per acre	329.10	274.76	288.44	370.82
Hedging gains/losses per acre	0.31	-	-	1.74
Crop insurance per acre	17.57	27.48	33.50	10.41
Other crop income per acre	1.86	2.22	2.63	1.35
Gross return per acre	348.84	304.46	324.57	384.32
<b>Direct Expenses</b>				
Seed and plants	63.07	68.30	59.50	55.00
Fertilizer	15.27	12.55	17.82	14.20
Crop chemicals	36.24	43.18	32.19	29.81
Crop insurance	19.36	19.01	15.78	15.93
Storage	0.26	0.05	0.74	0.32
Fuel & oil	11.06	11.78	12.40	12.52
Repairs	19.53	19.89	19.32	21.29
Custom hire	5.34	6.73	7.47	2.29
Hired labor	0.59	0.18	0.01	3.82
Land rent	132.93	141.64	112.97	114.24
Machinery leases	0.64	1.63	0.39	0.68
Operating interest	6.16	7.38	9.38	2.74
Miscellaneous	4.99	5.95	0.87	2.59
Total direct expenses per acre	315.45	338.25	288.84	275.44
Return over direct exp per acre	33.39	-33.79	35.73	108.88
<b>Overhead Expenses</b>				
Hired labor	13.62	12.79	2.70	13.69
Machinery leases	5.51	2.49	10.06	5.92
Building leases	1.64	5.35	1.33	1.24
Farm insurance	6.19	6.86	6.28	6.75
Utilities	2.96	2.26	5.01	2.88
Dues & professional fees	2.82	2.40	2.80	3.21
Interest	2.32	3.01	1.48	2.18
Mach & bldg depreciation	24.76	26.32	22.94	24.58
Miscellaneous	2.96	1.74	2.84	2.27
Total overhead expenses per acre	62.78	63.22	55.44	62.73
Total dir & ovhd expenses per acre	378.22	401.47	344.28	338.17
Net return per acre	-29.39	-97.01	-19.71	46.15
Government payments	8.28	7.94	5.85	7.61
Net return with govt pmts	-21.11	-89.07	-13.86	53.76
Labor & management charge	27.94	25.35	29.96	30.63
Net return over lbr & mgt	-49.04	-114.42	-43.82	23.14
<b>Cost of Production</b>				
Total direct expense per bu.	8.62	11.08	8.98	6.61
Total dir & ovhd exp per bu.	10.34	13.16	10.71	8.11
Less govt & other income	9.57	11.92	9.40	7.61
With labor & management	10.34	12.75	10.33	8.34
Net value per unit	9.00	9.00	8.97	8.94
Machinery cost per acre	66.22	70.20	71.89	67.47
Est. labor hours per acre	1.38	1.24	1.14	1.69

**Crop Enterprise Analysis**  
**2017 Moorhead Farm Business Management Annual Report**  
**(Farms Sorted By Return to Overhead)**

**Soybeans Seed on Owned Land**

	<u>Avg. Of All Farms</u>
Number of farms	8
Acres	182.63
Yield per acre (bu.)	40.42
Operators share of yield %	100.00
Value per bu.	10.86
Total product return per acre	438.95
Other crop income per acre	2.04
Gross return per acre	441.00
<b>Direct Expenses</b>	
Seed and plants	68.18
Fertilizer	17.04
Crop chemicals	38.06
Crop insurance	14.79
Storage	0.71
Fuel & oil	11.61
Repairs	24.94
Custom hire	2.26
Machinery leases	2.06
Marketing	1.39
Operating interest	9.81
Miscellaneous	2.76
Total direct expenses per acre	193.61
Return over direct exp per acre	247.38
<b>Overhead Expenses</b>	
Hired labor	8.31
Machinery leases	1.91
Building leases	0.83
RE & pers. property taxes	24.52
Farm insurance	6.98
Utilities	3.88
Dues & professional fees	5.79
Interest	54.79
Mach & bldg depreciation	24.50
Miscellaneous	3.11
Total overhead expenses per acre	134.63
Total dir & ovhd expenses per acre	328.25
Net return per acre	112.75
Government payments	9.81
Net return with govt pmts	122.56
Labor & management charge	27.74
Net return over lbr & mgt	94.82
<b>Cost of Production</b>	
Total direct expense per bu.	4.79
Total dir & ovhd exp per bu.	8.12
Less govt & other income	7.83
With labor & management	8.51
Net value per unit	10.86
Machinery cost per acre	65.69
Est. labor hours per acre	1.57

**Crop Enterprise Analysis**  
**2017 Moorhead Farm Business Management Annual Report**  
**(Farms Sorted By Return to Overhead)**

**Soybeans Seed on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of farms	13
Acres	419.13
Yield per acre (bu.)	40.38
Operators share of yield %	100.00
Value per bu.	10.68
Total product return per acre	431.29
Crop insurance per acre	3.49
Other crop income per acre	1.86
Gross return per acre	436.64
<b>Direct Expenses</b>	
Seed and plants	62.66
Fertilizer	12.37
Crop chemicals	37.00
Crop insurance	16.16
Storage	0.61
Fuel & oil	12.79
Repairs	27.28
Custom hire	0.68
Hired labor	0.38
Land rent	124.34
Machinery leases	1.92
Marketing	1.65
Operating interest	7.25
Miscellaneous	2.65
Total direct expenses per acre	307.74
Return over direct exp per acre	128.90
<b>Overhead Expenses</b>	
Hired labor	11.76
Machinery leases	2.56
Building leases	1.17
Farm insurance	7.49
Utilities	3.35
Dues & professional fees	5.49
Interest	2.01
Mach & bldg depreciation	27.95
Miscellaneous	2.42
Total overhead expenses per acre	64.19
Total dir & ovhd expenses per acre	371.93
Net return per acre	64.71
Government payments	8.71
Net return with govt pmts	73.42
Labor & management charge	29.42
Net return over lbr & mgt	43.99
<b>Cost of Production</b>	
Total direct expense per bu.	7.62
Total dir & ovhd exp per bu.	9.21
Less govt & other income	8.86
With labor & management	9.59
Net value per unit	10.68
Machinery cost per acre	71.60
Est. labor hours per acre	1.53

**Crop Enterprise Analysis**  
**2017 Moorhead Farm Business Management Annual Report**  
**(Farms Sorted By Return to Overhead)**

**Wheat, Spring on Owned Land**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	32	6	7	7
Acres	186.40	150.67	152.34	146.87
Yield per acre (bu.)	73.57	66.21	72.45	80.73
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	5.98	5.72	6.07	6.17
Total product return per acre	439.69	378.62	439.56	497.89
Crop insurance per acre	1.54	0.49	0.47	-
Other crop income per acre	2.77	3.36	3.06	4.24
Gross return per acre	444.00	382.47	443.10	502.13
<b>Direct Expenses</b>				
Seed and plants	21.30	19.13	22.11	16.78
Fertilizer	76.73	74.77	79.13	76.22
Crop chemicals	28.00	27.24	28.62	37.75
Crop insurance	14.13	14.70	12.89	18.57
Storage	0.64	-	0.84	0.04
Fuel & oil	12.63	10.95	13.16	10.30
Repairs	25.91	19.60	17.31	24.04
Custom hire	3.40	7.93	4.01	4.75
Machinery leases	0.30	-	1.31	-
Operating interest	6.68	6.84	9.00	3.60
Miscellaneous	5.64	10.31	10.10	5.14
Total direct expenses per acre	195.37	191.46	198.47	197.21
Return over direct exp per acre	248.63	191.01	244.63	304.92
<b>Overhead Expenses</b>				
Hired labor	17.40	22.64	13.86	9.96
Machinery leases	2.81	6.56	1.68	3.72
Building leases	1.61	0.44	5.73	2.46
RE & pers. property taxes	25.05	26.17	17.37	25.01
Farm insurance	8.45	5.15	7.01	10.24
Utilities	3.89	2.31	3.60	3.66
Dues & professional fees	3.57	2.77	2.94	4.88
Interest	51.75	42.79	40.75	50.43
Mach & bldg depreciation	29.05	20.95	28.18	31.14
Miscellaneous	3.45	1.89	4.65	4.87
Total overhead expenses per acre	147.02	131.68	125.77	146.36
Total dir & ovhd expenses per acre	342.39	323.14	324.24	343.56
Net return per acre	101.61	59.33	118.86	158.57
Government payments	14.12	8.78	10.15	10.56
Net return with govt pmts	115.73	68.11	129.01	169.13
Labor & management charge	30.95	25.14	27.45	31.65
Net return over lbr & mgt	84.77	42.97	101.56	137.48
<b>Cost of Production</b>				
Total direct expense per bu.	2.66	2.89	2.74	2.44
Total dir & ovhd exp per bu.	4.65	4.88	4.48	4.26
Less govt & other income	4.40	4.69	4.29	4.07
With labor & management	4.82	5.07	4.67	4.46
Net value per unit	5.98	5.72	6.07	6.17
Machinery cost per acre	73.02	63.45	66.14	73.04
Est. labor hours per acre	1.65	1.54	1.39	1.38

**Crop Enterprise Analysis**  
**2017 Moorhead Farm Business Management Annual Report**  
**(Farms Sorted By Return to Overhead)**

**Wheat, Spring on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	51	10	10	11
Acres	431.66	406.26	366.16	389.57
Yield per acre (bu.)	73.41	67.74	74.77	78.33
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	6.01	5.81	5.96	6.19
Total product return per acre	441.53	393.21	445.62	485.10
Crop insurance per acre	1.26	-	1.16	0.95
Other crop income per acre	1.99	2.44	3.28	1.11
Gross return per acre	444.79	395.65	450.06	487.16
<b>Direct Expenses</b>				
Seed and plants	19.55	19.35	19.75	19.20
Fertilizer	77.42	73.10	76.60	72.60
Crop chemicals	29.24	30.98	29.32	19.36
Crop insurance	13.75	14.86	15.12	13.05
Drying expense	0.18	0.03	-	0.60
Storage	0.32	0.66	0.76	0.01
Fuel & oil	12.31	11.58	11.09	15.37
Repairs	22.95	21.96	24.89	27.91
Custom hire	5.29	11.11	8.56	3.94
Land rent	131.79	143.27	126.93	111.14
Machinery leases	0.73	0.09	0.98	-
Marketing	0.56	0.34	0.06	1.73
Operating interest	6.24	6.90	6.74	3.29
Miscellaneous	4.86	8.57	5.82	2.53
Total direct expenses per acre	325.19	342.78	326.61	290.73
Return over direct exp per acre	119.60	52.87	123.45	196.43
<b>Overhead Expenses</b>				
Hired labor	15.46	18.86	16.64	15.70
Machinery leases	2.97	6.59	1.99	2.92
Building leases	2.19	0.43	3.30	1.38
Farm insurance	6.80	5.15	6.38	8.21
Utilities	2.76	2.36	2.55	3.19
Dues & professional fees	3.49	3.72	2.97	3.38
Interest	2.02	2.90	1.99	1.17
Mach & bldg depreciation	24.50	22.58	25.16	30.15
Miscellaneous	2.85	1.66	2.41	2.20
Total overhead expenses per acre	63.01	64.24	63.37	68.31
Total dir & ovhd expenses per acre	388.20	407.02	389.98	359.04
Net return per acre	56.59	-11.38	60.08	128.12
Government payments	11.26	8.68	8.66	16.02
Net return with govt pmts	67.85	-2.70	68.74	144.14
Labor & management charge	29.89	25.32	29.51	35.28
Net return over lbr & mgt	37.96	-28.01	39.22	108.86
<b>Cost of Production</b>				
Total direct expense per bu.	4.43	5.06	4.37	3.71
Total dir & ovhd exp per bu.	5.29	6.01	5.22	4.58
Less govt & other income	5.09	5.84	5.04	4.35
With labor & management	5.50	6.22	5.44	4.80
Net value per unit	6.01	5.81	5.96	6.19
Machinery cost per acre	68.21	72.80	72.18	78.13
Est. labor hours per acre	1.51	1.42	1.58	1.60



**Crop Enterprise Analysis**  
**2017 Moorhead Farm Business Management Annual Report**  
**(Farms Sorted By Return to Overhead)**

**Soybeans, Food on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of farms	8
Acres	345.60
Yield per acre (bu.)	27.97
Operators share of yield %	100.00
Value per bu.	13.27
Total product return per acre	371.26
Crop insurance per acre	14.35
Other crop income per acre	3.51
Gross return per acre	389.11
<b>Direct Expenses</b>	
Seed and plants	3.29
Fertilizer	21.66
Crop chemicals	55.65
Crop insurance	21.52
Fuel & oil	14.88
Repairs	26.43
Custom hire	9.34
Hired labor	5.21
Land rent	130.96
Machinery leases	0.84
Marketing	0.83
Operating interest	5.58
Miscellaneous	3.95
Total direct expenses per acre	300.16
Return over direct exp per acre	88.95
<b>Overhead Expenses</b>	
Hired labor	13.70
Machinery leases	3.13
Building leases	2.36
Farm insurance	7.24
Utilities	3.90
Dues & professional fees	3.48
Interest	1.98
Mach & bldg depreciation	22.77
Miscellaneous	4.10
Total overhead expenses per acre	62.66
Total dir & ovhd expenses per acre	362.82
Net return per acre	26.29
Government payments	7.44
Net return with govt pmts	33.73
Labor & management charge	27.26
Net return over lbr & mgt	6.47
<b>Cost of Production</b>	
Total direct expense per bu.	10.73
Total dir & ovhd exp per bu.	12.97
Less govt & other income	12.07
With labor & management	13.04
Net value per unit	13.27
Machinery cost per acre	77.00
Est. labor hours per acre	1.29

**Crop Enterprise Analysis**  
**2017 Moorhead Farm Business Management Annual Report**  
**Sugarbeets - Joint Ventures**  
**(Farms Sorted By Return to Overhead)**

**Sugar Beets on Owned Land**

	<u>Avg. Of All Farms</u>
Number of farms	14
Acres	146.78
Yield per acre (ton)	32.72
Operators share of yield %	100.00
Value per ton	41.25
Total product return per acre	1,349.58
Other crop income per acre	0.60
Gross return per acre	1,350.19
<b>Direct Expenses</b>	
Seed and plants	230.14
Fertilizer	82.61
Crop chemicals	109.76
Crop insurance	26.29
Fuel & oil	44.48
Repairs	85.60
Custom hire	22.82
Hired labor	41.41
Stock/quota lease	152.48
Machinery leases	0.93
Hauling and trucking	25.81
Operating interest	36.14
Miscellaneous	5.89
Total direct expenses per acre	864.36
Return over direct exp per acre	485.82
<b>Overhead Expenses</b>	
Hired labor	38.45
Machinery leases	13.41
Building leases	5.16
RE & pers. property taxes	26.74
Farm insurance	11.74
Utilities	8.87
Dues & professional fees	7.05
Interest	71.66
Mach & bldg depreciation	88.13
Miscellaneous	9.26
Total overhead expenses per acre	280.48
Total dir & ovhd expenses per acre	1,144.84
Net return per acre	205.35
Government payments	11.41
Net return with govt pmts	216.75
Labor & management charge	82.34
Net return over lbr & mgt	134.41
<b>Cost of Production</b>	
Total direct expense per ton	26.42
Total dir & ovhd exp per ton	34.99
Less govt & other income	34.62
With labor & management	37.14
Net value per unit	41.25
Machinery cost per acre	254.58
Est. labor hours per acre	4.51

**Crop Enterprise Analysis**  
**2017 Moorhead Farm Business Management Annual Report**  
**Sugarbeets - Joint Ventures**  
**(Farms Sorted By Return to Overhead)**

**Sugar Beets on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	25	5	5	5
Acres	242.61	267.66	173.88	120.50
Yield per acre (ton)	30.93	29.79	33.55	34.82
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	40.98	39.10	40.01	41.64
Total product return per acre	1,267.63	1,164.77	1,342.26	1,449.87
Crop insurance per acre	21.14	54.81	-	-
Other crop income per acre	1.97	2.28	2.63	4.16
Gross return per acre	1,290.74	1,221.86	1,344.89	1,454.03
<b>Direct Expenses</b>				
Seed and plants	233.06	231.19	234.54	233.42
Fertilizer	78.96	81.81	86.84	83.24
Crop chemicals	92.96	74.28	88.18	108.17
Crop insurance	30.79	28.33	25.60	44.61
Fuel & oil	52.12	53.85	70.35	45.72
Repairs	86.98	83.26	76.60	84.75
Custom hire	23.74	56.37	19.05	10.03
Hired labor	32.08	35.28	35.38	32.87
Land rent	132.67	144.00	122.70	116.44
Stock/quota lease	167.36	186.16	186.16	129.98
Machinery leases	2.11	7.84	1.56	-
Hauling and trucking	30.57	107.79	6.51	27.99
Operating interest	25.48	32.16	34.89	16.63
Miscellaneous	4.47	7.41	2.82	6.59
Total direct expenses per acre	993.35	1,129.72	991.18	940.43
Return over direct exp per acre	297.39	92.13	353.71	513.60
<b>Overhead Expenses</b>				
Hired labor	42.02	43.38	53.52	21.76
Machinery leases	15.72	20.52	9.22	42.58
Building leases	8.79	1.54	22.82	1.72
Farm insurance	12.80	9.94	8.16	4.76
Utilities	9.93	9.87	10.89	10.74
Dues & professional fees	5.41	5.07	3.60	4.86
Interest	11.01	10.05	4.26	7.77
Mach & bldg depreciation	86.30	89.58	103.65	84.31
Miscellaneous	14.51	24.12	7.32	12.06
Total overhead expenses per acre	206.50	214.06	223.44	190.57
Total dir & ovhd expenses per acre	1,199.85	1,343.78	1,214.62	1,131.00
Net return per acre	90.89	-121.93	130.27	323.03
Government payments	9.56	11.05	17.10	8.41
Net return with govt pmts	100.45	-110.88	147.37	331.44
Labor & management charge	98.52	88.51	105.59	126.18
Net return over lbr & mgt	1.92	-199.38	41.78	205.26
<b>Cost of Production</b>				
Total direct expense per ton	32.12	37.92	29.55	27.01
Total dir & ovhd exp per ton	38.79	45.10	36.21	32.48
Less govt & other income	37.74	42.82	35.62	32.12
With labor & management	40.92	45.79	38.77	35.75
Net value per unit	40.98	39.10	40.01	41.64
Machinery cost per acre	273.22	310.64	281.58	270.63
Est. labor hours per acre	4.70	4.12	6.16	5.53

**Crop Enterprise Analysis**  
**2017 Moorhead Farm Business Management Annual Report**  
**Sugarbeets Excluding Joint Ventures**  
**(Farms Sorted By Return to Overhead)**

**Sugar Beets on Owned Land**

	<u>Avg. Of All Farms</u>
Number of farms	13
Acres	92.74
Yield per acre (ton)	31.75
Operators share of yield %	100.00
Value per ton	40.86
Total product return per acre	1,297.24
Other crop income per acre	6.78
Gross return per acre	1,304.02
<b>Direct Expenses</b>	
Seed and plants	228.03
Fertilizer	74.04
Crop chemicals	110.13
Crop insurance	30.48
Fuel & oil	38.95
Repairs	92.69
Custom hire	12.83
Hired labor	26.21
Hauling and trucking	17.41
Operating interest	27.37
Miscellaneous	4.02
Total direct expenses per acre	662.18
Return over direct exp per acre	641.84
<b>Overhead Expenses</b>	
Hired labor	75.64
Machinery leases	11.26
Building leases	4.11
RE & pers. property taxes	28.79
Farm insurance	12.80
Utilities	12.01
Dues & professional fees	5.15
Interest	72.07
Mach & bldg depreciation	99.51
Miscellaneous	11.93
Total overhead expenses per acre	333.25
Total dir & ovhd expenses per acre	995.43
Net return per acre	308.58
Government payments	11.17
Net return with govt pmts	319.76
Labor & management charge	106.89
Net return over lbr & mgt	212.87
<b>Cost of Production</b>	
Total direct expense per ton	20.86
Total dir & ovhd exp per ton	31.35
Less govt & other income	30.79
With labor & management	34.15
Net value per unit	40.86
Machinery cost per acre	249.92
Est. labor hours per acre	6.00

**Crop Enterprise Analysis**  
**2017 Moorhead Farm Business Management Annual Report**  
**Sugarbeets Excluding Joint Ventures**  
**(Farms Sorted By Return to Overhead)**

**Sugar Beets on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of farms	20
Acres	259.34
Yield per acre (ton)	31.47
Operators share of yield %	100.00
Value per ton	39.78
Total product return per acre	1,251.65
Crop insurance per acre	0.20
Other crop income per acre	6.62
Gross return per acre	1,258.47
<b>Direct Expenses</b>	
Seed and plants	226.50
Fertilizer	78.06
Crop chemicals	98.77
Crop insurance	33.08
Fuel & oil	46.03
Repairs	81.62
Custom hire	10.67
Hired labor	36.83
Land rent	141.53
Hauling and trucking	16.45
Operating interest	18.67
Miscellaneous	4.96
Total direct expenses per acre	793.17
Return over direct exp per acre	465.31
<b>Overhead Expenses</b>	
Hired labor	85.73
Machinery leases	10.67
Building leases	1.87
Farm insurance	13.97
Utilities	10.84
Dues & professional fees	5.35
Interest	7.30
Mach & bldg depreciation	99.89
Miscellaneous	9.85
Total overhead expenses per acre	245.46
Total dir & ovhd expenses per acre	1,038.63
Net return per acre	219.84
Government payments	11.27
Net return with govt pmts	231.11
Labor & management charge	109.15
Net return over lbr & mgt	121.96
<b>Cost of Production</b>	
Total direct expense per ton	25.21
Total dir & ovhd exp per ton	33.01
Less govt & other income	32.43
With labor & management	35.90
Net value per unit	39.78
Machinery cost per acre	243.15
Est. labor hours per acre	6.20

# Corn on Cash Rented Land

## Moorhead Farm Business Management Program - Northland College

	<u>5-yr Average</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
Number of Fields	41	40	37			45
Acres	433.75	460.64	475.51	430.94		367.91
Yield per Acre	155.52	168.11	182.04	158.54	139.78	129.13
** Value per Unit	3.44	2.99	3.06	3.33	3.78	4.02
Product Value	527.02	502.20	557.95	528.54	527.83	518.60
Other Income	37.09	14.18	32.53	29.96	60.10	48.66
<b>Gross Return</b>	<b>568.14</b>	<b>516.38</b>	<b>590.48</b>	<b>558.50</b>	<b>608.10</b>	<b>567.25</b>
<b>Direct Costs</b>						
Seed	94.51	90.66	90.84	95.04	95.94	100.05
Fertilizer	117.64	93.21	97.20	124.16	130.62	143.00
Chemicals	26.90	31.74	27.17	24.71	25.52	25.34
Crop Insurance	22.57	22.23	17.65	22.03	24.34	26.60
Fuel & Oil	27.63	20.13	20.38	24.37	40.19	33.06
Repairs	35.44	34.88	35.53	32.84	35.84	38.09
Custom Hire	5.37	5.76	5.08	5.47	3.05	7.50
Land Rent	129.06	127.14	126.94	131.67	131.01	128.56
Other Direct Exp	25.43	26.26	22.44	20.14	36.39	21.90
Total Direct	486.41	452.02	450.58	480.43	522.89	526.13
Return over Direct	81.73	64.36	139.90	78.07	85.20	41.12
<b>Overhead Costs</b>						
Other Labor	21.76	23.11	21.36	20.66	23.86	19.82
Intermediate Interest	5.29	4.42	5.95	5.92	4.98	5.17
Depreciation	53.37	46.75	51.09	59.75	61.67	47.61
Other Overhead Exp	30.51	33.74	29.33	29.89	31.55	28.06
Total Ovhd Expenses	110.94	108.02	107.73	116.22	122.06	100.66
<b><u>Total Direct/Ovhd Expenses</u></b>	<b><u>597.35</u></b>	<b><u>560.04</u></b>	<b><u>558.31</u></b>	<b><u>596.65</u></b>	<b><u>644.96</u></b>	<b><u>626.80</u></b>
<b>*** Net Return</b>	<b>-29.21</b>	<b>-43.66</b>	<b>32.17</b>	<b>-38.15</b>	<b>-36.86</b>	<b>-59.54</b>

\*\* - Value per Unit is a combination of actual Fall selling price and/or value on Dec 31st of that crop year.

\*\*\* - Net Return does **not** include direct government income or principal payment expenses or personal draw expenses

# Soybeans on Cash Rented Land

## Moorhead Farm Business Management Program - Northland College

	<u>5-yr Average</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
Number of Fields	61	61	57			64
Acres	608.97	721.63	658.37	616.17		439.72
Yield per Acre	40.56	36.59	46.00	44.61	40.27	35.34
** Value per Unit	9.83	8.99	9.19	8.44	9.89	12.63
Product Value	394.57	329.10	422.91	376.35	398.15	446.36
Other Income	13.98	19.74	18.99	6.44	13.99	10.75
<b>Gross Return</b>	<b>408.55</b>	<b>348.84</b>	<b>441.89</b>	<b>382.79</b>	<b>412.14</b>	<b>457.11</b>
<b>Direct Costs</b>						
Seed	66.59	63.07	64.44	67.43	69.73	68.27
Fertilizer	13.90	15.27	15.78	13.68	10.43	14.36
Chemicals	28.46	36.24	29.39	28.87	25.25	22.53
Crop Insurance	20.01	19.36	16.62	18.31	21.37	24.40
Fuel & Oil	14.65	11.06	10.91	13.12	20.29	17.85
Repairs	20.55	19.53	19.52	18.95	22.76	21.98
Custom Hire	4.58	5.34	4.49	3.63	5.21	4.25
Land Rent	131.70	132.93	129.90	131.03	137.10	127.52
Other Direct Exp	13.13	12.64	13.99	10.55	15.17	13.31
Total Direct	313.57	315.45	305.04	305.58	327.31	314.46
Return over Direct	94.99	33.39	136.86	77.21	84.83	142.65
<b>Overhead Costs</b>						
Other Labor	11.49	13.62	11.08	11.76	12.20	8.77
Intermediate Interest	2.68	2.32	3.19	2.80	2.33	2.76
Depreciation	27.24	24.76	26.16	28.86	31.20	25.24
Other Overhead Exp	20.30	22.08	19.66	19.74	20.35	19.67
Total Ovhd Expenses	61.71	62.78	60.09	63.16	66.08	56.44
<b><u>Total Direct/Ovhd Expenses</u></b>	<b><u>375.27</u></b>	<b><u>378.22</u></b>	<b><u>365.12</u></b>	<b><u>368.74</u></b>	<b><u>393.39</u></b>	<b><u>370.90</u></b>
<b>*** Net Return</b>	<b>33.28</b>	<b>-29.39</b>	<b>76.77</b>	<b>14.05</b>	<b>18.75</b>	<b>86.21</b>

\*\* - Value per Unit is a combination of actual Fall selling price and/or value on Dec 31st of that crop year.

\*\*\* - Net Return does **not** include direct government income or principal payment expenses or personal draw expenses

# Spring Wheat on Cash Rented Land

## Moorhead Farm Business Management Program - Northland College

	<u>5-yr Average</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
Number of Fields	48	51	48			44
Acres	416.86	431.66	444.99	438.06		352.73
Yield per Acre	71.03	73.41	69.20	75.50	70.73	66.31
** Value per Unit	5.63	6.01	5.03	4.95	5.58	6.57
Product Value	398.76	441.53	348.36	373.82	394.40	435.68
Other Income	9.45	3.26	15.10	11.99	14.97	1.95
<b>Gross Return</b>	<b>408.21</b>	<b>444.79</b>	<b>363.46</b>	<b>385.81</b>	<b>409.35</b>	<b>437.64</b>
<b>Direct Costs</b>						
Seed	22.45	19.55	18.86	22.75	24.66	26.43
Fertilizer	93.19	77.42	80.49	97.71	102.27	108.06
Chemicals	26.50	29.24	25.07	24.50	26.68	27.02
Crop Insurance	14.79	13.74	13.94	12.60	14.86	18.81
Fuel & Oil	15.19	12.31	11.53	13.76	20.87	17.50
Repairs	21.89	22.95	22.04	20.74	21.88	21.84
Custom Hire	5.59	5.29	6.05	5.52	6.89	4.22
Land Rent	132.69	131.79	132.94	132.66	133.13	132.93
Other Direct Exp	15.43	12.89	15.40	15.35	22.14	11.36
Total Direct	348.04	325.19	326.31	345.61	374.92	368.16
Return over Direct	59.97	119.60	37.15	40.20	34.43	68.48
<b>Overhead Costs</b>						
Other Labor	13.48	15.46	13.41	13.01	13.18	12.34
Intermediate Interest	2.49	2.02	2.71	2.80	2.49	2.41
Depreciation	26.38	24.50	26.95	26.99	29.40	24.06
Other Overhead Exp	19.86	21.03	19.54	21.18	18.95	18.58
Total Ovhd Expenses	62.20	63.01	62.61	63.98	64.02	57.39
<b><u>Total Direct/Ovhd Expenses</u></b>	<b><u>410.24</u></b>	<b><u>388.20</u></b>	<b><u>388.92</u></b>	<b><u>409.59</u></b>	<b><u>438.94</u></b>	<b><u>425.55</u></b>
<b>*** Net Return</b>	<b>-2.03</b>	<b>56.59</b>	<b>-25.46</b>	<b>-23.78</b>	<b>-29.58</b>	<b>12.09</b>

\*\* - Value per Unit is a combination of actual Fall selling price and/or value on Dec 31st of that crop year.

\*\*\* - Net Return does **not** include direct government income or principal payment expenses or personal draw expenses



# Sugarbeets on Cash Rented Land (excluding joint venture)

## Moorhead Farm Business Management Program - Northland College

	<u>5-yr Average</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
Number of Fields	20	20	17			23
Acres	212.60	259.34	211.26	198.35		181.43
Yield per Acre	28.25	31.47	33.10	28.69	22.56	25.45
** Value per Unit	37.69	39.78	36.08	44.77	35.61	32.20
Product Value	1,070.64	1,251.65	1,194.32	1,284.46	803.20	819.56
Other Income	17.44	6.82	4.64		12.06	46.24
<b>Gross Return</b>	<b>1,084.59</b>	<b>1,258.47</b>	<b>1,198.97</b>	<b>1,284.46</b>	<b>815.27</b>	<b>865.80</b>
<b>Direct Costs</b>						
Seed	218.20	226.50	227.09	218.20	215.82	203.37
Fertilizer	92.43	78.06	82.95	95.49	105.37	100.29
Chemicals	86.67	98.77	104.04	80.38	67.60	82.56
Crop Insurance	29.75	33.08	30.29	27.03	24.78	33.55
Fuel & Oil	61.69	46.03	43.83	59.17	82.44	76.98
Repairs	98.70	81.62	100.44	98.87	105.31	107.28
Direct Labor	36.42	36.83	40.92	45.05	26.12	33.20
Custom Hire	12.48	10.67	14.01	15.45	9.10	13.17
Land Rent	141.53	141.53	143.21	142.11	142.75	138.04
Other Direct Exp	33.17	40.08	39.72	29.50	26.83	29.73
Total Direct	811.04	793.17	826.51	811.24	806.13	818.17
Return over Direct	273.55	465.31	372.46	473.21	9.14	47.63
<b>Overhead Costs</b>						
Other Labor	83.41	85.73	82.37	73.80	83.69	91.47
Intermediate Interest	9.57	7.30	8.81	11.60	9.14	11.02
Depreciation	111.15	99.89	114.15	112.48	115.51	113.73
Other Overhead Exp	55.55	52.54	54.56	57.86	59.49	53.32
Total Ovhd Expenses	259.69	245.46	259.89	255.74	267.83	269.54
<b><u>Total Direct/Ovhd Expenses</u></b>	<b><u>1,070.73</u></b>	<b><u>1,038.63</u></b>	<b><u>1,086.40</u></b>	<b><u>1,066.98</u></b>	<b><u>1,073.95</u></b>	<b><u>1,087.71</u></b>
<b>*** Net Return</b>	<b>13.86</b>	<b>219.84</b>	<b>112.57</b>	<b>217.48</b>	<b>-258.69</b>	<b>-221.91</b>

\*\* - Value per Unit is a combination of actual Fall selling price and/or value on Dec 31st of that crop year.

\*\*\* - Net Return does **not** include direct government income or principal payment expenses or personal draw expenses