

# 2014 ANNUAL REPORT

## South Central North Dakota

North Dakota Farm and Ranch Business  
Management Education



[www.ndfarmmanagement.com](http://www.ndfarmmanagement.com)



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# NORTH DAKOTA FARM BUSINESS MANAGEMENT EDUCATION

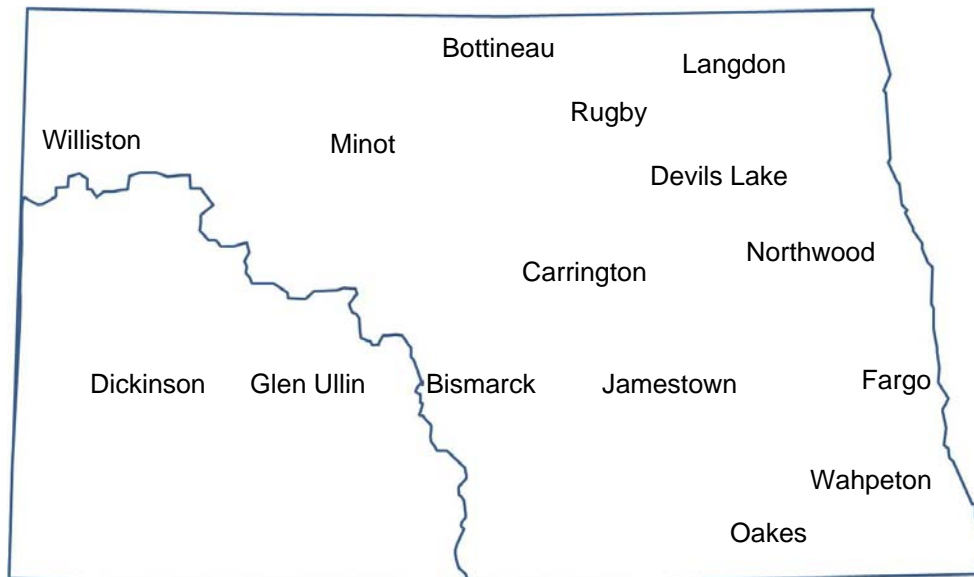
## REGION 3 – SOUTH CENTRAL AVERAGES 2014 ANNUAL REPORT

The South Central (Region 3) farm business analyses were submitted by the following instructors represented by their cooperating schools.

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This report was made possible by the farm families who cooperated with their farm management instructors in getting the records for 2014 closed out on a timely basis. The farm management instructors cited above generated the Finpack year-end farm analyses. Andrew Swenson, NDSU Extension Service, databased the Finpack analyses of farms and generated the comparative tables for this report.

Location of all Farm Business Management Education Programs in North Dakota



2014 South Central Report  
North Dakota Farm Business Management Education

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## INTRODUCTION

This report summarizes the individual farm records of the specific region or the whole state as identified on the acknowledgement page. The current financial status of farm operators and net returns from each crop and livestock enterprise is reported. In addition to the average of all farms, the averages for the high, middle, and low-income groups are also presented. All participating farm/ranch families are provided a copy of the regional averages report. They can compare their own Finan business analysis to the regional and/or state averages report and study the areas that may need management improvement. A review of the comparative information may reveal how certain aspects of the business or enterprises excel and help answer why they are profitable.

The regional and state averages reports are divided into three major sections; farm operators' reports, crop reports and livestock reports. Explanatory notes precede each section. The first section contains 15 tables with whole farm financial and operator information. The last three tables of this section are financial summaries in which farms are categorized by gross revenue, age of operator and farm type, respectively. The second section provides performance information on crop enterprises. The third section provides performance results on livestock enterprises. Lastly, figures 1 through 10 provide trend information for various measures of finance and/or production.

The 2014 summary reports are based upon data generated by the Finan individual farm analysis completed by farm/ranch families enrolled in the statewide Adult Farm and Ranch Business Management Education program in North Dakota. Instructors pooled the individual business analysis and submitted the combined school data to the FINPACK Center located at North Dakota State University. The FINPACK Center did provide schools with local averages in order to assist instructors with obtaining relevant local management trends.

Farm/ranch families enrolled in the statewide program are encouraged to request assistance from their instructors to determine short-term cash flow and long-term projections. Each instructor has access to FINPACK computer programs, which can be used to generate annual or multi-year (cash flow) farm plans and/or long term alternative projections.

This is the 26th year that the regional averages have been generated in North Dakota based upon the four regions shown in the state map on the cover of this publication. A regional report has been generated and published for Regions 2- North Central, 3 - South Central and 4 - Western identified on the North Dakota map. Farms in Region 1 - Red River Valley are located within the Red River Valley. Those farms are contained in a combined Minnesota-North Dakota Red River Valley report. The state averages report includes all farms participating in the North Dakota Farm Business Management Education Program that were represented in the regional averages and also those farms which were processed and submitted after the March deadline date. All of these reports may be ordered from Farm Business Management, P.O. Box 6022, Bismarck, ND, 58506-6022 for \$5 per copy. The reports are available online at [www.ndfarmmanagement.com](http://www.ndfarmmanagement.com).

## EXPLANATORY NOTES FOR THE FARM OPERATORS' REPORTS

The tables include the same number of farms, which were all of the farms whose records were judged to be of sufficient quality to be included in the overall report. However, the balance sheets include only sole proprietors. Partnerships and corporations are excluded because some debt is held outside of the business causing potential misinterpretations of the financial statement. The number of farms included in each of the crop tables varies because all farms do not have the same enterprises. Also, some farmers' records were complete enough to be included in the whole-farm tables, but at times, these same farmers' crop records were not complete enough to include in the respective crop and livestock tables.

Rounding of individual items for the report may have caused minor discrepancies with the printed totals which are calculated before rounding.

### Farm Income Statement

This statement is a summary of income, expenses, or resultant profit or loss from farming operations during the calendar year.

The first section of the table lists cash farm income from all sources. There are three possible sources of cash income from crops. The first is income from cash sales. The second is income from crops stored under government loan programs when the loan is treated as income for the year in which the crop was stored. If the crop value has not been entered as income when it was stored, then it would be treated as cash income in the year it was sold. The third is Net Government Sales, which refers to the difference between income credited in the year a crop was stored and the actual cash income received at the time it was sold. There are two categories of cash income from livestock sales. "Raised" steer, hogs, and lambs refer to animals raised from birth to market weight on the farm. "Finished" animals refers to those purchased as feeders and fed to market weight. Government payments are grouped as "Direct, CCP & ACRE pymts;" "LDP payments" which are loan deficiency payments that may be received on production when local prices are below the county loan rate for the crop; "Other government payments" which refers to all other government payments such as disaster payments but not including CRP payments; and CRP payments.

The second section of the income statement lists cash expenses. "Labor" includes only labor hired. "Interest" includes only interest actually paid. No opportunity charges on farm equity capital or unpaid labor are included.

The difference between "Gross Cash Farm Income" and "Total Cash Expense" is the "Net Cash Farm Income." This is net farm income on a cash basis.

The last two sections of the income statement deal with the non-cash changes in the farm business. The "Inventory Changes" and "Depreciation" sections are used to convert the cash income statement (Net Cash Farm Income) derived from the first two sections into an accrual income statement. The final adjustment is for "Gain or loss on capital sales." The bottom line, labeled "Net farm Income," represents the return to the operator's and family's unpaid labor, management, and equity capital (net worth). In other words, it represents the return to all of the resources that are owned by the farm family and hence, not purchased or paid a wage. However, it does not include any debt forgiveness or asset repossessions.

### Inventory Changes

This is the detailed statement of inventory changes that is summarized in the income statement. It includes beginning and ending inventories and the calculated changes.

## Depreciation

This is the detailed statement of depreciation and other capital adjustments that is summarized in the income statement. It includes beginning and ending inventories, and capital sales and purchases.

## Profitability Measures

This table shows profitability when capital assets are valued at cost. Various measures of performance are calculated. In the previous tables no opportunity costs are used. In this table, opportunity costs for labor, capital, and management are used. The measures and their components are described below.

"**Rate of return on assets**" is the "Return on farm assets" divided by "Average farm assets."

"**Rate of return on equity**" is the "Return of farm equity" divided by "Average farm equity."

"**Operating profit margin**" is the "Return on farm assets" divided by "Value of farm production."

"**Asset turnover rate**" is the "Value of farm production" divided by "Average farm assets."

"**Farm interest expense**" is the accrual interest cost, usually it will be different from the cash interest expense.

"**Value of operator's labor and management**" is an opportunity cost for unpaid operator's labor and management that is used in the calculation of several financial performance measures. A value of \$20,000 per full time operator plus 5% of value of farm production is used.

"**Return of farm assets**" is calculated by adding "Farm interest expense" to "Net farm income" and then subtracting the "Value of operator's labor and management."

"**Average farm assets**" is the average of beginning and ending total farm assets.

"**Return on farm equity**" is calculated by subtracting the "Value of operator's labor and management" from "Net farm income."

"**Average farm equity**" is the average of beginning and ending farm net worth.

"**Value of farm production**" is gross cash farm income minus purchased feed and feeder livestock and adjusted for inventory changes in crops, market livestock, accounts receivable and breeding livestock.

## Liquidity & Repayment Capacity Measures

The table shows several measures of liquidity and repayment capacity. Calculation of repayment capacity starts with net farm income from operations and adds back the non-cash expense of depreciation. Personal income is also added. Family living expenses, personal debt payments and income taxes paid are subtracted to determine the capital debt repayment capacity.

## Balance Sheets

The ending balance sheet statements and solvency measures are presented for sole proprietors only. Current assets are valued at market price at the time of the inventory which is December 31. In balance sheet at cost values, intermediate and long-term assets that are depreciable are valued at cost remaining (amount remaining to be depreciated, plus salvage value). Raised breeding livestock is valued at conservative market replacement costs. Land is valued at cost or conservative market value. In balance sheet at market values, the intermediate and long term assets are listed at market value, and deferred income tax liabilities are estimated.

## Statement of Cash Flows

This statement organizes cash inflows and outflows by the following three categories: Operating activities, investing activities, and financing activities.



## Financial Standards 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.

**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.

**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.

**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.

## **Crop Production and Marketing Summary**

This table contains three sections. The first section reports averages for total acres owned, crop land by tenure and total pasture acres. The next two sections show average price received and average yields for major crops. These tables are sorted on the basis of "Net farm income."

## **Household and Personal Expenses**

For those farms that keep records, the household and personal expenses are summarized. The farms are grouped in the same ranking as in the Income Statement. Since not all farms keep these records, the number of farms in the low profit and high profit groups may be different. Averages are determined by the number of farms keeping these records. The Statement of Cash Flows presents calculated family living and includes all farms. Income tax paid is also shown in the Statement of Cash Flows and includes all farms.

## **Operator and Labor Information**

This table reports the average for the number of operators per farm, the operator's age, and the number of years farming.

## **Nonfarm Summary**

This table also reports nonfarm income. The figure reported is the average over all farms not just those reporting nonfarm income.

**Farm Income Statement**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	136	27	27	28
<b>Cash Farm Income</b>				
Barley	47,809	7,890	16,503	157,536
Beans, Black Turtle	2,651	-	-	12,876
Beans, Navy	151	762	-	-
Beans, Pinto	23,504	47,549	2,541	38,571
Canola	7,029	1,314	3,699	11,671
Corn	161,113	275,102	76,161	226,420
Flax	33	-	-	114
Hay, Alfalfa	822	10	-	3,985
Hay, Grass	564	108	-	2,145
Hay, Mixed Alfalfa/Grass	1,534	303	7,158	-
Oats	192	-	-	434
Peas, Field	1,532	-	940	6,134
Rye	753	-	1,143	2,008
Soybeans	224,680	296,978	137,868	384,620
Stover	49	-	245	-
Straw	44	113	22	-
Sunflowers	10,698	4,007	1,104	27,315
Sunflowers, Confectionary	2,160	2,532	-	3,342
Wheat, Durum	3,002	-	-	3,099
Wheat, Spring	105,398	85,135	32,646	244,905
Wheat, Winter	3,083	1,178	1,696	563
Custom Work	1,039	-	5,235	-
Rented Out	4,294	9,394	150	9,798
Soybeans, Food	5,414	4,139	1,365	-
Miscellaneous crop income	21	-	-	-
Beef Bulls	89	-	-	432
Beef Cow-Calf, Beef Calves	32,430	10,515	25,204	65,317
Beef Replacement Heifers	11,473	-	3,148	44,263
Beef Backgrounding	39,900	-	11,331	80,926
Beef Finishing	10,962	234	-	50,860
Beef Grazing	7,105	-	-	33,374
Dairy, Milk	34,966	-	5,285	15,718
Dairy, Dairy Calves	1,233	-	201	-
Dairy Replacement Heifers	93	-	467	-
Sheep, Feeder Lamb Prod, Fdr Lambs	44	-	-	216
Sheep, Lamb Finishing	120	-	-	584
Beef Finish Cull Cows	1,067	633	1,489	1,717
Cull breeding livestock	13,258	3,495	5,663	26,694
Misc. livestock income	3,808	5	138	13,294
Crop government payments	2,924	4,012	1,807	5,868
CRP payments	1,287	918	509	1,907
Other government payments	15,086	10,699	5,919	34,247
Custom work income	5,889	3,257	3,234	12,543
Patronage dividends, cash	4,361	3,707	2,041	8,082
Crop insurance income	43,991	47,852	40,701	66,078
Property insurance income	1,517	1,298	69	4,088
Other farm income	10,800	9,261	9,922	19,929
Gross Cash Farm Income	849,976	832,401	405,605	1,621,675

**Farm Income Statement (continued)**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	136	27	27	28
<b>Cash Farm Expense</b>				
Seed	96,684	108,896	60,801	154,766
Fertilizer	91,366	96,964	41,361	184,902
Crop chemicals	47,464	55,345	23,833	71,867
Crop insurance	30,637	36,757	17,318	47,388
Drying expense	5,083	12,116	3,736	4,704
Storage	1,277	757	244	3,713
Irrigation energy and fees	3,388	16,409	-	540
Crop marketing	981	550	164	2,508
Crop miscellaneous	1,867	574	894	3,682
Consultants	660	850	777	791
Feeder livestock purchase	45,293	-	13,763	130,303
Purchased feed	20,586	1,961	8,673	29,599
Breeding fees	629	-	94	1,139
Veterinary	3,854	780	1,618	6,086
Supplies	3,079	344	73	4,737
Livestock custom hire	188	-	-	362
Grazing fees	84	-	-	297
Hauling and trucking	904	-	-	-
Livestock marketing	1,217	57	832	1,999
Interest	28,958	40,791	19,529	33,879
Fuel & oil	42,720	43,205	23,115	72,130
Repairs	46,219	55,607	24,281	70,872
Custom hire	19,019	27,536	14,045	24,243
Hired labor	27,059	24,137	5,377	52,872
Land rent	91,653	112,386	46,550	164,966
Machinery leases	9,204	20,941	3,431	8,658
Building leases	647	786	1,238	152
Real estate taxes	4,455	3,684	3,516	7,813
Farm insurance	11,640	11,486	6,779	18,185
Utilities	9,781	8,136	3,931	18,380
Dues & professional fees	2,859	2,072	1,197	8,069
Miscellaneous	13,511	13,580	7,957	22,235
Total cash expense	662,965	696,707	335,127	1,151,836
Net cash farm income	187,011	135,694	70,478	469,839
<b>Inventory Changes</b>				
Prepays and supplies	-9,870	-44,854	-7,074	13,463
Accounts receivable	-5,255	-1,043	-10,239	-8,979
Hedging accounts	-1,911	538	162	-9,965
Other current assets	-136	-875	856	3,205
Crops and feed	-21,258	-93,131	21,134	-23,124
Market livestock	40,686	9,699	15,915	106,741
Breeding livestock	-157	-12	184	-554
Other assets	-3,864	411	623	-21,762
Accounts payable	1,465	-6,434	6,798	6,217
Accrued interest	-2,779	-8,409	-2,207	1,233
Total inventory change	-3,079	-144,109	26,152	66,474
Net operating profit	183,931	-8,415	96,630	536,313
<b>Depreciation</b>				
Machinery and equipment	-60,144	-63,220	-28,776	-106,444
Titled vehicles	-3,725	-4,002	-2,590	-5,081
Buildings and improvements	-7,574	-9,733	-1,804	-12,197
Total depreciation	-71,443	-76,955	-33,170	-123,723
Net farm income from operations	112,489	-85,370	63,460	412,590
Gain or loss on capital sales	432	2,449	-918	447
Net farm income	112,920	-82,920	62,542	413,037

**Inventory Changes**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	136	27	27	28
Net cash farm income	187,011	135,694	70,478	469,839
<b>Crops and Feed</b>				
Ending inventory	520,742	414,630	179,784	1,337,931
Beginning inventory	542,000	507,761	158,649	1,361,055
Inventory change	-21,258	-93,131	21,134	-23,124
<b>Market Livestock</b>				
Ending inventory	104,713	16,780	41,179	260,216
Beginning inventory	64,027	7,081	25,264	153,475
Inventory change	40,686	9,699	15,915	106,741
<b>Accts Receivable</b>				
Ending inventory	38,576	23,994	8,247	72,416
Beginning inventory	43,831	25,037	18,486	81,395
Inventory change	-5,255	-1,043	-10,239	-8,979
<b>Prepaid Expenses and Supplies</b>				
Ending inventory	85,585	59,306	42,770	219,817
Beginning inventory	95,455	104,160	49,844	206,354
Inventory change	-9,870	-44,854	-7,074	13,463
<b>Hedging Activities</b>				
Ending inventory	6,308	3,212	1,834	18,858
Withdrawals	2,088	-	-	4,528
Beginning inventory	4,463	1,093	868	12,258
Deposits	5,845	1,581	805	21,093
Gain or loss	-1,911	538	162	-9,965
<b>Other Current Assets</b>				
Ending inventory	3,176	4,995	2,409	5,256
Beginning inventory	3,312	5,870	1,553	2,050
Inventory change	-136	-875	856	3,205
<b>Breeding Livestock</b>				
Ending inventory	99,190	16,631	54,625	189,491
Capital sales	1,832	263	-	8,157
Beginning inventory	85,661	14,787	48,725	163,082
Capital purchases	15,518	2,119	5,716	35,120
Depreciation, capital adjust	-157	-12	184	-554
<b>Other Capital Assets</b>				
Ending inventory	67,381	73,496	18,975	189,937
Capital sales	453	-	211	1,282
Beginning inventory	58,520	66,662	16,912	159,085
Capital purchases	13,178	6,422	1,652	53,896
Depreciation, capital adjust	-3,864	411	623	-21,762
<b>Accounts Payable</b>				
Beginning inventory	15,464	19,707	12,654	16,932
Ending inventory	13,999	26,141	5,856	10,715
Inventory change	1,465	-6,434	6,798	6,217
<b>Accrued Interest</b>				
Beginning inventory	11,329	16,650	5,131	12,393
Ending inventory	14,108	25,059	7,338	11,160
Inventory change	-2,779	-8,409	-2,207	1,233
Total inventory change	-3,079	-144,109	26,152	66,474
Net operating profit	183,931	-8,415	96,630	536,313

**Depreciation**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	136	27	27	28
Net operating profit	183,931	-8,415	96,630	536,313
<b>Machinery and Equipment</b>				
Ending inventory	694,665	828,866	329,456	1,173,850
Capital sales	7,314	21,299	3,491	6,173
Beginning inventory	668,877	815,376	317,692	1,111,586
Capital purchases	93,246	98,009	44,032	174,882
Depreciation, capital adjust.	-60,144	-63,220	-28,776	-106,444
<b>Titled Vehicles</b>				
Ending inventory	37,391	51,804	29,027	40,988
Capital sales	1,695	4,551	3,029	531
Beginning inventory	35,664	52,229	25,948	38,578
Capital purchases	7,147	8,129	8,697	8,022
Depreciation, capital adjust.	-3,725	-4,002	-2,590	-5,081
<b>Buildings and Improvements</b>				
Ending inventory	244,933	357,974	66,860	371,827
Capital sales	88	-	444	-
Beginning inventory	222,855	335,118	59,522	335,189
Capital purchases	29,739	32,589	9,586	48,835
Depreciation, capital adjust.	-7,574	-9,733	-1,804	-12,197
Total depreciation, capital adj.	-71,443	-76,955	-33,170	-123,723
Net farm income from operations	112,489	-85,370	63,460	412,590
Gain or loss on capital sales	432	2,449	-918	447
Net farm income	112,920	-82,920	62,542	413,037

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**Profitability Measures**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Net Farm Income)**

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	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	136	27	27	28
<b>Profitability (assets valued at cost)</b>				
Net farm income from operations	112,489	-85,370	63,460	412,590
Rate of return on assets	3.6 %	-3.5 %	3.9 %	7.3 %
Rate of return on equity	3.6 %	-11.0 %	4.0 %	8.4 %
Operating profit margin	11.4 %	-11.8 %	12.1 %	23.1 %
Asset turnover rate	31.5 %	29.5 %	32.4 %	31.6 %
Farm interest expense	31,737	49,199	21,735	32,646
Value of operator lbr and mgmt.	54,163	51,744	35,556	97,040
Return on farm assets	90,063	-87,914	49,639	348,196
Average farm assets	2,514,339	2,536,588	1,267,400	4,773,507
Return on farm equity	58,325	-137,113	27,903	315,550
Average farm equity	1,629,838	1,244,159	690,592	3,747,751
Value of farm production	793,197	747,328	410,947	1,507,700



**Liquidity & Repayment Capacity Measures**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	136	27	27	28
<b>Liquidity</b>				
Current ratio	1.63	0.92	1.65	2.59
Working capital	229,413	-47,546	126,146	745,452
Working capital to gross inc	32.9 %	-7.1 %	29.1 %	58.2 %
Current assets	590,836	516,989	319,084	1,212,908
Current liabilities	361,423	564,535	192,938	467,456
Gross revenues (accrual)	697,119	673,015	433,383	1,281,059
<b>Repayment capacity</b>				
Net farm income from operations	112,489	-85,370	63,460	412,590
Depreciation	71,443	76,955	33,170	123,723
Personal income	34,891	24,514	42,401	18,186
Family living/owner withdrawals	-66,136	-60,629	-51,437	-96,831
Cash discrepancy	16	243	415	-1,069
Payments on personal debt	-3,395	-2,850	-1,848	-2,018
Income taxes paid	-23,190	-14,115	-11,945	-47,788
Interest on term debt	15,337	27,463	14,851	20,527
Capital debt repayment capacity	141,438	-34,031	88,652	428,388
Scheduled term debt payments	-89,422	-149,083	-56,704	-98,281
Capital debt repayment margin	52,016	-183,114	31,949	330,108
Cash replacement allowance	-40,576	-24,982	-17,427	-93,783
Replacement margin	11,440	-208,096	14,522	236,325
Term debt coverage ratio	1.58	-0.23	1.56	4.36
Replacement coverage ratio	1.09	-0.20	1.20	2.23

**Balance Sheet at Cost Values**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	125	25	27	22
<b>Assets</b>				
<b>Current Farm Assets</b>				
Cash and checking balance	29,241	18,621	42,862	23,332
Prepaid expenses & supplies	58,704	60,010	42,770	105,384
Growing crops	889	215	1,113	1,727
Accounts receivable	23,330	18,647	8,247	16,174
Hedging accounts	4,250	3,469	1,834	9,155
Crops held for sale or feed	370,422	373,525	179,784	799,127
Crops under government loan	3,840	19,200	-	-
Market livestock held for sale	98,468	18,123	41,179	258,009
Other current assets	1,693	5,180	1,296	-
Total current farm assets	590,836	516,989	319,084	1,212,908
<b>Intermediate Farm Assets</b>				
Breeding livestock	79,994	17,961	54,625	176,419
Machinery and equipment	588,319	751,231	329,456	873,097
Titled vehicles	30,658	54,149	29,027	23,741
Other intermediate assets	10,075	14,048	15,602	15,249
Total intermediate farm assets	709,046	837,389	428,710	1,088,506
<b>Long Term Farm Assets</b>				
Farm land	660,729	543,052	513,468	1,341,895
Buildings and improvements	199,401	318,932	66,860	276,083
Other long-term assets	23,523	63,359	3,374	34,072
Total long-term farm assets	883,653	925,343	583,701	1,652,050
Total Farm Assets	2,183,535	2,279,721	1,331,495	3,953,464
Total Nonfarm Assets	296,360	241,148	265,298	324,913
Total Assets	2,479,895	2,520,869	1,596,793	4,278,376
<b>Liabilities</b>				
<b>Current Farm Liabilities</b>				
Accrued interest	14,174	26,660	7,338	13,091
Accounts payable	13,789	27,753	5,856	12,729
Current notes	262,625	391,952	137,893	353,991
Government crop loans	1,699	8,496	-	-
Principal due on term debt	69,135	109,673	41,852	87,645
Total current farm liabilities	361,423	564,535	192,938	467,456
Total intermediate farm liabs	158,405	273,365	118,977	143,034
Total long term farm liabilities	374,335	350,473	316,082	727,447
Total farm liabilities	894,163	1,188,373	627,997	1,337,937
Total nonfarm liabilities	44,299	34,525	43,114	54,140
Total liabilities	938,462	1,222,898	671,111	1,392,077
Net worth (farm and nonfarm)	1,541,434	1,297,971	925,682	2,886,300
Net worth change	51,620	-113,946	42,807	239,548
Percent net worth change	3 %	-8 %	5 %	9 %
<b>Ratio Analysis</b>				
Current farm liabilities / assets	61 %	109 %	60 %	39 %
Intermediate farm liab. / assets	22 %	33 %	28 %	13 %
Long term farm liab. / assets	42 %	38 %	54 %	44 %
Total debt to asset ratio	38 %	49 %	42 %	33 %

**Statement Of Cash Flows**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	136	27	27	28
Beginning cash (farm & nonfarm)	32,112	38,335	24,215	45,487
<b>Cash Provided By Operating Activities</b>				
Gross cash farm income	849,976	832,401	405,605	1,621,675
Total cash farm expense	-662,965	-696,707	-335,127	-1,151,836
Net cash from hedging transactions	-3,757	-1,581	-805	-16,565
Cash provided by operating	183,254	134,113	69,673	453,273
<b>Cash Provided By Investing Activities</b>				
Sale of breeding livestock	1,832	263	-	8,157
Sale of machinery & equipment	8,056	24,219	3,713	6,574
Sale of titled vehicles	1,319	3,747	1,889	577
Sale of farm land	1,219	6,140	-	-
Sale of farm buildings	154	333	444	-
Sale of other farm assets	453	-	211	1,282
Sale of nonfarm assets	5,059	7,243	10,693	7,169
Purchase of breeding livestock	-15,518	-2,119	-5,716	-35,120
Purchase of machinery & equip.	-93,246	-98,009	-44,032	-174,882
Purchase of titled vehicles	-7,147	-8,129	-8,697	-8,022
Purchase of farm land	-115,995	-63,778	-50,263	-364,714
Purchase of farm buildings	-29,739	-32,589	-9,586	-48,835
Purchase of other farm assets	-13,178	-6,422	-1,652	-53,896
Purchase of nonfarm assets	-25,931	-5,365	-34,704	-28,832
Cash provided by investing	-282,663	-174,465	-137,700	-690,541
<b>Cash Provided By Financing Activities</b>				
Money borrowed	674,117	762,692	378,045	1,189,666
Principal payments	-509,732	-670,536	-259,286	-817,024
Personal income	34,891	24,514	42,401	18,186
Family living/owner withdrawals	-66,136	-60,629	-51,437	-96,831
Income and social security tax	-23,190	-14,115	-11,945	-47,788
Capital contributions	-	-	-	-
Capital distributions	-4,296	-6,088	-3,333	-6,264
Dividends paid	-	-	-	-
Cash gifts and inheritances	4,664	741	1,037	3,305
Gifts given	-2,617	-596	-84	-8,755
Other cash flows	180	-	-	-
Cash provided by financing	107,881	35,984	95,398	234,494
Net change in cash balance	8,472	-4,369	27,371	-2,774
Ending cash (farm & nonfarm)	40,600	34,210	52,000	41,645
Discrepancy	-16	-243	-415	1,069

**Financial Standards Measures**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	136	27	27	28
<b>Liquidity</b>				
Current ratio	1.63	0.92	1.65	2.59
Working capital	229,413	-47,546	126,146	745,452
Working capital to gross inc	32.9 %	-7.1 %	29.1 %	58.2 %
<b>Solvency (cost)</b>				
Farm debt to asset ratio	41 %	52 %	47 %	34 %
Farm equity to asset ratio	59 %	48 %	53 %	66 %
Farm debt to equity ratio	0.69	1.09	0.89	0.51
<b>Profitability (cost)</b>				
Rate of return on farm assets	3.6 %	-3.5 %	3.9 %	7.3 %
Rate of return on farm equity	3.6 %	-11.0 %	4.0 %	8.4 %
Operating profit margin	11.4 %	-11.8 %	12.1 %	23.1 %
Net farm income	112,920	-82,920	62,542	413,037
EBITDA	215,669	40,784	118,365	568,959
<b>Repayment Capacity</b>				
Capital debt repayment capacity	141,438	-34,031	88,652	428,388
Capital debt repayment margin	52,016	-183,114	31,949	330,108
Replacement margin	11,440	-208,096	14,522	236,325
Term debt coverage ratio	1.58	-0.23	1.56	4.36
Replacement coverage ratio	1.09	-0.20	1.20	2.23
<b>Efficiency</b>				
Asset turnover rate (cost)	31.5 %	29.5 %	32.4 %	31.6 %
Operating expense ratio	74.9 %	94.6 %	72.7 %	65.9 %
Depreciation expense ratio	8.3 %	10.3 %	7.7 %	7.4 %
Interest expense ratio	3.7 %	6.6 %	5.0 %	2.0 %
Net farm income ratio	13.1 %	-11.1 %	14.4 %	24.8 %

**Crop Production and Marketing Summary**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	136	27	27	28
<b>Acreage Summary</b>				
Total acres owned	947	850	553	1,690
Total crop acres	1,964	2,034	1,099	3,424
Crop acres owned	558	584	317	885
Crop acres cash rented	1,313	1,291	715	2,455
Crop acres share rented	94	158	67	85
Total pasture acres	490	113	166	1,184
Percent crop acres owned	28 %	29 %	29 %	26 %
Mach invest/crop acre cost	366	430	319	345
<b>Average Price Received (Cash Sales Only)</b>				
Soybeans per bushel	10.97	10.97	10.34	11.79
Corn per bushel	3.80	3.83	3.41	4.22
Wheat, Spring per bushel	6.28	5.87	5.01	6.76
Barley per bushel	6.16	-	-	6.31
Beans, Pinto per cwt	28.90	-	-	-
Sunflowers per cwt	21.12	-	-	-
Wheat, Winter per bushel	5.94	-	-	-
Canola per cwt	22.95	-	-	-
Hay, Grass per ton	55.30	-	-	-
Oats per bushel	3.36	-	-	-
<b>Average Yield Per Acre</b>				
Soybeans (bushel)	33.99	32.61	32.62	37.94
Wheat, Spring (bushel)	59.32	57.37	55.75	62.46
Corn (bushel)	127.77	132.01	121.42	130.37
Pasture (aum)	0.924	0.821	0.948	0.957
Hay, Grass (ton)	1.78	-	1.69	1.75
Hay, Mixed Alfalfa/Grass (ton)	1.95	-	1.67	2.31
Barley (bushel)	84.42	-	79.26	86.20
Sunflowers (cwt)	10.75	9.10	-	-
Hay, Alfalfa (ton)	2.40	-	-	3.13
Beans, Pinto (cwt)	14.46	12.04	-	-
Corn Silage (ton)	12.05	-	-	11.04
Wheat, Winter (bushel)	44.35	-	-	-
Hay, Small Grain (ton)	2.99	-	-	3.39
Canola (cwt)	17.82	-	-	-

**Household and Personal Expenses**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	59	9	13	11
Average family size	2.6	2.2	2.2	3.1
<b>Family Living Expenses</b>				
Food and meals expense	7,169	5,660	6,160	8,930
Medical care	4,226	2,805	3,944	6,272
Health insurance	7,484	4,100	5,580	14,346
Cash donations	1,862	418	874	2,257
Household supplies	8,050	7,271	11,292	10,735
Clothing	2,007	1,239	1,502	5,028
Personal care	6,399	7,341	4,780	7,986
Child / Dependent care	325	186	206	838
Alimony and child support	227	-	145	-
Gifts	1,889	1,580	1,774	2,315
Education	1,189	1,551	906	2,160
Recreation	4,452	4,597	4,576	9,030
Utilities (household share)	3,734	3,281	3,889	4,387
Personal vehicle operating exp	3,414	2,430	3,761	3,939
Household real estate taxes	271	920	132	139
Dwelling rent	265	-	961	177
Household repairs	2,215	1,308	3,031	1,452
Personal interest	894	1,637	1,133	445
Disability / Long term care ins	369	24	252	96
Life insurance payments	3,040	2,397	1,404	6,631
Personal property insurance	388	643	299	539
Miscellaneous	1,291	1,111	3,119	1,155
Total cash family living expense	61,159	50,499	59,721	88,858
Family living from the farm	119	-	-	-
Total family living	61,278	50,499	59,721	88,858
<b>Other Nonfarm Expenditures</b>				
Income taxes	27,256	14,682	16,609	59,617
Furnishing & appliance purchases	142	-	106	18
Nonfarm vehicle purchases	2,323	-	615	9,316
Nonfarm real estate purchases	1,277	-	1,495	-
Other nonfarm capital purchases	-320	-	-2,827	-2,175
Nonfarm savings & investments	8,460	2,188	6,633	25,237
Total other nonfarm expenditures	39,139	16,870	22,632	92,014
Total cash family living investment & nonfarm capital purch	100,298	67,370	82,353	180,871

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**Operator and Labor Information**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Net Farm Income)**

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	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	136	27	27	28
<b>Operator Information</b>				
Average number of operators	1.1	1.1	1.0	1.2
Average age of operators	46.4	49.5	40.4	49.9
Average number of years farming	22.5	25.3	17.4	27.7
<b>Results Per Operator</b>				
Working capital	359,607	-6,800	126,146	1,197,705
Total assets (cost)	2,643,747	2,562,769	1,596,793	4,421,153
Total liabilities	922,754	1,291,859	671,111	1,036,319
Net worth (cost)	1,720,993	1,270,910	925,682	3,384,834
Gross farm income	784,122	697,614	433,383	1,373,319
Total farm expense	681,448	777,096	369,924	1,033,539
Net farm income from operations	102,674	-79,482	63,460	339,780
Net nonfarm income	31,846	22,824	42,401	14,977
Family living & tax withdrawals	81,517	69,362	62,967	119,979
Total acres owned	864.0	791.8	553.1	1,391.9
Total crop acres	1,793.1	1,893.5	1,099.2	2,819.8
Crop acres owned	509.3	544.0	317.4	728.4
Crop acres cash rented	1,198.3	1,202.2	714.7	2,021.6
Crop acres share rented	85.5	147.3	67.1	69.8
Total pasture acres	447.0	105.2	165.5	975.1
<b>Labor Analysis</b>				
Number of farms	136	27	27	28
Total unpaid labor hours	1,953	1,787	1,489	2,643
Total hired labor hours	1,343	1,018	221	2,477
Total labor hours per farm	3,296	2,805	1,710	5,120
Unpaid hours per operator	1,783	1,664	1,489	2,176

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**Nonfarm Summary**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Net Farm Income)**

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	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	136	27	27	28
<b>Nonfarm Income</b>				
Personal wages & salary	20,155	16,728	20,571	9,509
Net nonfarm business income	6,350	1,984	9,168	801
Personal rental income	1,656	-	3,630	186
Personal interest income	586	185	36	1,839
Personal cash dividends	114	391	-	63
Tax refunds	1,364	1,262	1,808	535
Nontaxable personal inc.	180	-	-	-
Other nonfarm income	4,666	3,964	7,189	5,254
Total nonfarm income	35,070	24,514	42,401	18,186
Gifts and inheritances	4,664	741	1,037	3,305



**Financial Summary**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Gross Farm Income)**

	<u>Avg. Of</u> <u>All Farms</u>	<u>Less than</u> <u>50,000</u>	<u>50,001 -</u> <u>100,000</u>	<u>100,001 -</u> <u>250,000</u>	<u>250,001 -</u> <u>500,000</u>	<u>500,001 -</u> <u>1,000,000</u>	<u>Over</u> <u>1,000,000</u>
Number of farms	136	6	8	22	30	34	36
<b>Income Statement</b>							
Gross cash farm income	849,976	33,525	78,603	174,563	383,085	718,041	2,083,901
Total cash farm expense	662,965	42,652	64,659	153,741	277,421	545,847	1,642,398
Net cash farm income	187,011	-9,127	13,944	20,822	105,664	172,194	441,503
Inventory change	-3,079	11,166	20,835	49,262	-19,999	19,008	-49,514
Depreciation	-71,443	-2,385	-7,575	-12,048	-27,556	-58,992	-181,774
Net farm income from operations	112,489	-347	27,204	58,036	58,109	132,210	210,214
Gain or loss on capital sales	432	1,250	-	-	-	-633	2,021
Average net farm income	112,920	903	27,204	58,036	58,109	131,576	212,235
Median net farm income	61,595	2,458	22,220	55,702	57,109	121,842	168,695
<b>Profitability (cost)</b>							
Rate of return on assets	3.6 %	-2.4 %	4.0 %	6.2 %	3.3 %	5.1 %	2.9 %
Rate of return on equity	3.6 %	-11.7 %	4.8 %	7.9 %	3.0 %	6.1 %	2.6 %
Operating profit margin	11.4 %	-9.1 %	17.2 %	20.1 %	12.0 %	17.0 %	8.7 %
Asset turnover rate	31.5 %	26.5 %	23.0 %	30.9 %	27.3 %	30.1 %	33.2 %
<b>Liquidity &amp; Repayment (end of year)</b>							
Current assets	590,836	42,060	92,418	177,757	339,111	592,953	1,458,859
Current liabilities	361,423	30,420	64,165	103,857	179,976	346,165	943,643
Current ratio	1.63	1.38	1.44	1.71	1.88	1.71	1.55
Working capital	229,413	11,640	28,252	73,900	159,135	246,788	515,215
Working capital to gross inc	32.9 %	24.9 %	25.5 %	32.5 %	42.0 %	33.4 %	30.6 %
Term debt coverage ratio	1.58	0.53	2.20	2.31	1.68	1.62	1.48
Replacement coverage ratio	1.09	0.52	1.89	1.90	1.22	1.13	0.98
Term debt to EBITDA	2.18	9.47	1.99	2.39	2.81	2.16	2.03
<b>Solvency (end of year at cost)</b>							
Number of sole proprietors	125	6	8	21	30	33	27
Total assets	2,479,895	241,925	683,524	882,448	1,679,310	2,778,538	5,276,471
Total liabilities	938,462	125,140	310,614	366,567	526,490	1,149,907	1,949,350
Net worth	1,541,434	116,786	372,910	515,881	1,152,820	1,628,631	3,327,121
Net worth change	51,620	7,765	38,207	56,763	52,352	54,634	56,841
Farm debt to asset ratio	41 %	55 %	49 %	42 %	35 %	46 %	40 %
Total debt to asset ratio	38 %	52 %	45 %	42 %	31 %	41 %	37 %
Change in earned net worth %	3 %	7 %	11 %	12 %	5 %	3 %	2 %
<b>Nonfarm Information</b>							
Net nonfarm income	34,891	59,593	58,372	30,033	60,930	23,024	18,032
Farms reporting living expenses	59	2	2	8	16	17	14
Total family living expense	61,278	-	-	39,319	47,679	71,691	82,690
<b>Crop Acres</b>							
Total crop acres	1,964	169	282	622	1,031	1,754	4,434
Total crop acres owned	558	48	92	242	359	687	983
Total crop acres cash rented	1,313	121	159	327	575	1,000	3,280
Total crop acres share rented	94	-	31	53	97	66	171
Machinery value per crop acre	366	180	400	215	377	341	386

**Financial Summary**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Age of Operator)**

	<u>Avg. Of All Farms</u>	<u>Less Than 31</u>	<u>31 - 40</u>	<u>41 - 50</u>	<u>51 - 60</u>	<u>Over 60</u>
Number of farms	136	25	21	25	36	29
<b>Income Statement</b>						
Gross cash farm income	849,976	354,492	867,171	1,227,740	1,076,442	657,876
Total cash farm expense	662,965	267,337	761,477	1,040,624	799,563	437,550
Net cash farm income	187,011	87,155	105,694	187,116	276,879	220,326
Inventory change	-3,079	17,826	47,846	42,389	-34,857	-57,727
Depreciation	-71,443	-32,679	-50,946	-97,361	-108,085	-51,872
Net farm income from operations	112,489	72,303	102,595	132,144	133,936	110,727
Gain or loss on capital sales	432	52	-467	-972	2,207	417
Average net farm income	112,920	72,355	102,127	131,172	136,143	111,144
Median net farm income	61,595	59,299	54,740	79,594	58,822	56,630
<b>Profitability (cost)</b>						
Rate of return on assets	3.6 %	6.8 %	4.1 %	3.9 %	2.8 %	3.4 %
Rate of return on equity	3.6 %	10.1 %	4.4 %	4.0 %	2.5 %	3.4 %
Operating profit margin	11.4 %	15.2 %	9.8 %	10.4 %	10.3 %	14.5 %
Asset turnover rate	31.5 %	44.7 %	41.5 %	37.3 %	27.3 %	23.8 %
<b>Liquidity &amp; Repayment (end of year)</b>						
Current assets	590,836	274,611	625,394	811,303	754,256	497,616
Current liabilities	361,423	156,615	409,026	495,011	554,444	191,200
Current ratio	1.63	1.75	1.53	1.64	1.36	2.60
Working capital	229,413	117,995	216,368	316,292	199,812	306,415
Working capital to gross inc	32.9 %	29.8 %	28.2 %	31.0 %	23.9 %	59.1 %
Term debt coverage ratio	1.58	1.56	1.38	1.03	1.78	2.34
Replacement coverage ratio	1.09	1.44	1.14	0.82	1.11	1.19
Term debt to EBITDA	2.18	2.43	1.95	2.62	2.25	1.49
<b>Solvency (end of year at cost)</b>						
Number of sole proprietors	125	25	19	21	32	28
Total assets	2,479,895	1,060,819	1,981,224	2,869,493	3,410,449	2,729,625
Total liabilities	938,462	561,501	830,714	1,087,643	1,299,222	823,965
Net worth	1,541,434	499,318	1,150,509	1,781,850	2,111,227	1,905,659
Net worth change	51,620	62,769	39,612	75,922	21,225	66,323
Farm debt to asset ratio	41 %	54 %	45 %	39 %	42 %	34 %
Total debt to asset ratio	38 %	53 %	42 %	38 %	38 %	30 %
Change in earned net worth %	3 %	14 %	4 %	4 %	1 %	4 %
<b>Nonfarm Information</b>						
Net nonfarm income	34,891	23,436	38,757	18,724	34,383	56,532
Farms reporting living expenses	59	8	8	8	18	17
Total family living expense	61,278	39,272	53,533	88,263	66,614	56,930
<b>Crop Acres</b>						
Total crop acres	1,964	1,026	1,897	2,532	2,521	1,642
Total crop acres owned	558	99	200	681	786	823
Total crop acres cash rented	1,313	886	1,587	1,787	1,582	740
Total crop acres share rented	94	41	110	64	152	79
Machinery value per crop acre	366	268	329	333	425	380

**Financial Summary**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Farm Type)**

	<u>Avg. Of All Farms</u>	<u>Crop</u>	<u>Beef</u>	<u>Crop and Beef</u>	<u>Other</u>
Number of farms	136	85	11	23	15
<b>Income Statement</b>					
Gross cash farm income	849,976	972,645	688,225	504,333	416,567
Total cash farm expense	662,965	725,235	634,531	418,095	291,801
Net cash farm income	187,011	247,410	53,695	86,238	124,767
Inventory change	-3,079	-54,007	120,056	55,556	11,324
Depreciation	-71,443	-85,912	-27,459	-38,194	-42,437
Net farm income from operations	112,489	107,492	146,291	103,601	93,654
Gain or loss on capital sales	432	634	-	-19	352
Average net farm income	112,920	108,126	146,291	103,582	94,006
Median net farm income	61,595	54,774	133,770	56,630	37,137
<b>Profitability (cost)</b>					
Rate of return on assets	3.6 %	2.7 %	9.2 %	5.4 %	6.1 %
Rate of return on equity	3.6 %	2.2 %	16.0 %	6.3 %	10.8 %
Operating profit margin	11.4 %	8.6 %	33.7 %	18.2 %	19.8 %
Asset turnover rate	31.5 %	31.3 %	27.2 %	29.4 %	30.8 %
<b>Liquidity &amp; Repayment (end of year)</b>					
Current assets	590,836	684,498	622,682	470,607	232,918
Current liabilities	361,423	390,301	488,972	311,745	178,383
Current ratio	1.63	1.75	1.27	1.51	1.31
Working capital	229,413	294,197	133,710	158,862	54,535
Working capital to gross inc	32.9 %	37.8 %	17.0 %	27.1 %	15.6 %
Term debt coverage ratio	1.58	1.46	2.26	1.84	1.88
Replacement coverage ratio	1.09	0.92	2.08	1.56	1.78
Term debt to EBITDA	2.18	2.36	1.66	1.87	1.62
<b>Solvency (end of year at cost)</b>					
Number of sole proprietors	125	78	11	22	14
Total assets	2,479,895	2,843,248	1,833,311	1,898,944	1,876,454
Total liabilities	938,462	963,547	1,039,083	643,665	1,182,892
Net worth	1,541,434	1,879,701	794,228	1,255,279	693,562
Net worth change	51,620	34,318	109,545	75,871	64,391
Farm debt to asset ratio	41 %	37 %	57 %	36 %	68 %
Total debt to asset ratio	38 %	34 %	57 %	34 %	63 %
Change in earned net worth %	3 %	2 %	16 %	6 %	10 %
<b>Nonfarm Information</b>					
Net nonfarm income	34,891	36,892	40,857	23,751	40,911
Farms reporting living expenses	59	44	3	9	3
Total family living expense	61,278	63,959	-	57,445	-
<b>Crop Acres</b>					
Total crop acres	1,964	2,422	807	1,254	852
Total crop acres owned	558	665	362	498	233
Total crop acres cash rented	1,313	1,644	441	617	619
Total crop acres share rented	94	112	4	139	-
Machinery value per crop acre	366	373	338	307	384

## EXPLANATORY NOTES FOR CROPS TABLES

The "Crop Enterprise Analysis" tables show the average physical production, gross return, direct costs, overhead costs, and net returns per acre. The "Net Return per Acre" is the "Gross Return per Acre" minus the direct and overhead costs. "Net Return" represents the return to the operator's and family's unpaid labor, management, and equity. It represents the return to all of the resources which are owned by the farm family and hence, not purchased or paid a wage. Net returns are also calculated after a charge for unpaid operator labor and management and after an allocation of direct government payments. The last section of each crop table contains breakeven yield measures which provide useful standards or goals for the individual managers.

There are potentially three tables for each crop depending on the farmer's tenure on the land. The crop tables may be for (1) owned land, (2) cash rented land, and (3) share rented land. Individual farms may have data in all three tables if all three land tenure categories are represented in that farm business. When there are less than five farms with a particular crop and tenure, that table is not included in the report. Farms may be classified into the low 20%, the mid 20%, or the high 20% on the basis of net return per acre. The classification is done separately for each table, i.e., an individual farm may be in the low 20% for one crop, the high 20% for a second, and the middle 20% for a third crop. When there are less than 25 total farms with any particular crop and farmer's tenure, only overall averages are presented.

Several cost items, such as "utilities," "hired labor," and "interest paid," are listed under both "direct" and "overhead" costs because some of these costs are specific to that crop whereas others are general overhead costs of the farm. For example, "Machinery leases" as direct expense refers to machinery leased and used only in that crop enterprise; the most common example is the lease of equipment that is crop specific. However, cost of leasing machinery that is used for the entire farm operation is listed as an overhead cost. Interest payments are likewise divided into those incurred directly for a specific crop and those that are not. "Land Rent" is listed as a direct cost for each crop enterprise on cash rented land. In the case of double cropping, one-half of the rent is charged to each crop.

"Total direct expense per unit" and "Total dir & ovhd exp per unit" are calculated by dividing "Total direct expense per acre" and "Total dir & ovhd expenses per acre," respectively, by "Yield per acre." "With labor & management" is the breakeven yield after direct, overhead and a labor and management charge are considered. "Total exp less govt & oth income" is the breakeven yield after all costs (including a labor and management charge) are reduced by government payments and miscellaneous income.

In the last section of the crop table, "machinery cost per acre" is the sum of fuel, repairs, all custom hire and machinery leases, machinery depreciation and interest on intermediate debt.

Rounding of individual items for the report may have caused minor discrepancies with the calculated totals.

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Barley on Owned Land**

	<u>Avg. Of All Farms</u>
Number of farms	11
Yield per acre (bu.)	78.20
Operators share of yield %	100.00
Value per bu.	5.23
Total product return per acre	409.26
Crop insurance per acre	10.89
Other crop income per acre	0.17
Gross return per acre	420.31
<b>Direct Expenses</b>	
Seed	18.75
Fertilizer	66.95
Crop chemicals	30.36
Crop insurance	17.73
Drying expense	1.40
Fuel & oil	22.27
Repairs	19.40
Custom hire	11.16
Operating interest	3.73
Miscellaneous	0.93
Total direct expenses per acre	192.68
Return over direct exp per acre	227.64
<b>Overhead Expenses</b>	
Hired labor	6.98
Machinery leases	2.35
Building leases	0.76
RE & pers. property taxes	6.63
Farm insurance	5.24
Utilities	3.82
Dues & professional fees	0.47
Interest	14.73
Mach & bldg depreciation	36.69
Miscellaneous	11.40
Total overhead expenses per acre	89.07
Total dir & ovhd expenses per acre	281.75
Net return per acre	138.57
Government payments	6.11
Net return with govt pmts	144.68
Labor & management charge	23.28
Net return over lbr & mgt	121.40
<b>Cost of Production</b>	
Total direct expense per bu.	2.46
Total dir & ovhd exp per bu.	3.60
Less govt & other income	3.38
With labor & management	3.68
Net value per unit	5.23
Machinery cost per acre	90.52
Est. labor hours per acre	1.20

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Barley on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of farms	13
Yield per acre (bu.)	87.69
Operators share of yield %	100.00
Value per bu.	4.25
Total product return per acre	372.89
Crop insurance per acre	10.81
Other crop income per acre	1.06
Gross return per acre	384.77
<b>Direct Expenses</b>	
Seed	20.06
Fertilizer	57.81
Crop chemicals	24.27
Crop insurance	13.92
Drying expense	0.24
Fuel & oil	18.53
Repairs	14.38
Custom hire	4.98
Land rent	61.24
Operating interest	0.86
Miscellaneous	0.39
Total direct expenses per acre	216.68
Return over direct exp per acre	168.08
<b>Overhead Expenses</b>	
Hired labor	10.30
Machinery leases	1.44
Farm insurance	4.25
Utilities	3.45
Dues & professional fees	4.74
Interest	0.72
Mach & bldg depreciation	35.43
Miscellaneous	6.82
Total overhead expenses per acre	67.15
Total dir & ovhd expenses per acre	283.84
Net return per acre	100.93
Government payments	1.08
Net return with govt pmts	102.01
Labor & management charge	21.02
Net return over lbr & mgt	81.00
<b>Cost of Production</b>	
Total direct expense per bu.	2.47
Total dir & ovhd exp per bu.	3.24
Less govt & other income	3.09
With labor & management	3.33
Net value per unit	4.25
Machinery cost per acre	72.04
Est. labor hours per acre	0.99

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Beans, Pinto on Owned Land**

	<u>Avg. Of All Farms</u>
Number of farms	6
Yield per acre (cwt.)	14.14
Operators share of yield %	100.00
Value per cwt.	25.71
Total product return per acre	363.65
Crop insurance per acre	58.53
Gross return per acre	422.19
<b>Direct Expenses</b>	
Seed	49.07
Fertilizer	37.98
Crop chemicals	48.35
Crop insurance	23.52
Fuel & oil	17.92
Repairs	18.92
Custom hire	16.43
Operating interest	4.60
Miscellaneous	1.22
Total direct expenses per acre	218.02
Return over direct exp per acre	204.17
<b>Overhead Expenses</b>	
Hired labor	9.19
Machinery leases	5.87
RE & pers. property taxes	5.41
Farm insurance	3.36
Utilities	6.71
Dues & professional fees	0.37
Interest	22.77
Mach & bldg depreciation	37.04
Miscellaneous	5.51
Total overhead expenses per acre	96.22
Total dir & ovhd expenses per acre	314.24
Net return per acre	107.95
Government payments	-
Net return with govt pmts	107.95
Labor & management charge	24.16
Net return over lbr & mgt	83.79
<b>Cost of Production</b>	
Total direct expense per cwt.	15.41
Total dir & ovhd exp per cwt.	22.22
Less govt & other income	18.08
With labor & management	19.79
Net value per unit	25.71
Machinery cost per acre	96.28
Est. labor hours per acre	1.18

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Beans, Pinto on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of farms	9
Yield per acre (cwt.)	14.27
Operators share of yield %	100.00
Value per cwt.	25.52
Total product return per acre	364.17
Crop insurance per acre	60.70
Gross return per acre	424.87
<b>Direct Expenses</b>	
Seed	54.69
Fertilizer	36.36
Crop chemicals	64.03
Crop insurance	20.56
Fuel & oil	18.34
Repairs	23.14
Custom hire	5.38
Land rent	67.09
Operating interest	5.81
Miscellaneous	3.40
Total direct expenses per acre	298.79
Return over direct exp per acre	126.07
<b>Overhead Expenses</b>	
Hired labor	14.43
Machinery leases	5.28
Farm insurance	3.76
Utilities	6.47
Dues & professional fees	1.89
Interest	3.81
Mach & bldg depreciation	39.06
Miscellaneous	5.17
Total overhead expenses per acre	79.87
Total dir & ovhd expenses per acre	378.66
Net return per acre	46.21
Government payments	-
Net return with govt pmts	46.21
Labor & management charge	25.06
Net return over lbr & mgt	21.15
<b>Cost of Production</b>	
Total direct expense per cwt.	20.94
Total dir & ovhd exp per cwt.	26.54
Less govt & other income	22.29
With labor & management	24.04
Net value per unit	25.52
Machinery cost per acre	90.45
Est. labor hours per acre	1.23



**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Canola on Owned Land**

	<u>Avg. Of All Farms</u>
Number of farms	7
Yield per acre (cwt.)	17.61
Operators share of yield %	100.00
Value per cwt.	19.14
Total product return per acre	337.06
Crop insurance per acre	0.04
Gross return per acre	337.10
<b>Direct Expenses</b>	
Seed	52.16
Fertilizer	82.96
Crop chemicals	33.35
Crop insurance	7.72
Fuel & oil	18.22
Repairs	10.98
Custom hire	10.18
Operating interest	2.04
Miscellaneous	1.29
Total direct expenses per acre	218.92
Return over direct exp per acre	118.18
<b>Overhead Expenses</b>	
Hired labor	7.54
Machinery leases	0.62
RE & pers. property taxes	4.11
Farm insurance	3.68
Utilities	2.93
Dues & professional fees	0.70
Interest	9.16
Mach & bldg depreciation	26.70
Miscellaneous	4.72
Total overhead expenses per acre	60.15
Total dir & ovhd expenses per acre	279.06
Net return per acre	58.04
Government payments	-
Net return with govt pmts	58.04
Labor & management charge	18.18
Net return over lbr & mgt	39.85
<b>Cost of Production</b>	
Total direct expense per cwt.	12.43
Total dir & ovhd exp per cwt.	15.85
Less govt & other income	15.85
With labor & management	16.88
Net value per unit	19.14
Machinery cost per acre	67.65
Est. labor hours per acre	1.08

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Canola on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of farms	5
Yield per acre (cwt.)	17.98
Operators share of yield %	100.00
Value per cwt.	16.36
Total product return per acre	294.19
Crop insurance per acre	2.15
Gross return per acre	296.34
<b>Direct Expenses</b>	
Seed	53.77
Fertilizer	75.58
Crop chemicals	49.85
Crop insurance	6.67
Fuel & oil	19.45
Repairs	17.05
Custom hire	7.40
Land rent	48.46
Operating interest	2.66
Total direct expenses per acre	280.91
Return over direct exp per acre	15.43
<b>Overhead Expenses</b>	
Hired labor	9.59
Machinery leases	2.02
Farm insurance	4.06
Utilities	3.96
Dues & professional fees	0.10
Interest	1.50
Mach & bldg depreciation	28.57
Miscellaneous	3.39
Total overhead expenses per acre	53.18
Total dir & ovhd expenses per acre	334.09
Net return per acre	-37.76
Government payments	-
Net return with govt pmts	-37.76
Labor & management charge	19.33
Net return over lbr & mgt	-57.09
<b>Cost of Production</b>	
Total direct expense per cwt.	15.62
Total dir & ovhd exp per cwt.	18.58
Less govt & other income	18.46
With labor & management	19.53
Net value per unit	16.36
Machinery cost per acre	72.15
Est. labor hours per acre	0.92

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(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	51	10	10	11
Yield per acre (bu.)	126.10	111.60	118.68	149.01
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	3.34	3.21	3.36	3.52
Total product return per acre	421.25	357.91	398.92	524.16
Hedging gains/losses per acre	0.04	-	-	0.15
Crop insurance per acre	5.57	4.56	18.53	1.87
Other crop income per acre	0.54	3.43	-	-
Gross return per acre	427.41	365.90	417.45	526.18
<b>Direct Expenses</b>				
Seed	91.77	96.63	90.16	91.35
Fertilizer	108.79	123.89	107.86	116.38
Crop chemicals	24.87	24.91	15.96	29.34
Crop insurance	20.61	29.02	22.93	22.76
Drying expense	9.01	3.52	10.87	9.67
Fuel & oil	27.35	28.37	29.57	21.59
Repairs	29.79	28.43	28.54	20.73
Custom hire	7.17	11.63	2.21	5.83
Operating interest	6.32	11.53	9.06	5.21
Miscellaneous	2.34	1.47	6.51	-
Total direct expenses per acre	328.02	359.39	323.67	322.87
Return over direct exp per acre	99.39	6.50	93.78	203.31
<b>Overhead Expenses</b>				
Hired labor	11.90	16.22	7.49	14.70
Machinery leases	3.47	6.70	4.68	2.55
Building leases	1.75	0.11	0.27	-
RE & pers. property taxes	6.56	7.66	7.39	6.51
Farm insurance	4.97	4.30	5.24	5.36
Utilities	3.89	3.60	4.50	4.17
Dues & professional fees	0.98	0.72	0.65	1.01
Interest	26.83	30.03	27.22	35.55
Mach & bldg depreciation	44.73	49.55	58.46	38.72
Miscellaneous	7.60	7.43	8.10	4.49
Total overhead expenses per acre	112.68	126.35	124.00	113.05
Total dir & ovhd expenses per acre	440.70	485.74	447.67	435.92
Net return per acre	-13.29	-119.84	-30.22	90.26
Government payments	0.60	1.73	0.67	-
Net return with govt pmts	-12.70	-118.11	-29.55	90.26
Labor & management charge	30.68	32.37	31.62	26.30
Net return over lbr & mgt	-43.37	-150.48	-61.17	63.96
<b>Cost of Production</b>				
Total direct expense per bu.	2.60	3.22	2.73	2.17
Total dir & ovhd exp per bu.	3.49	4.35	3.77	2.93
Less govt & other income	3.44	4.27	3.61	2.91
With labor & management	3.68	4.56	3.88	3.09
Net value per unit	3.34	3.21	3.36	3.52
Machinery cost per acre	112.12	124.56	120.90	89.34
Est. labor hours per acre	1.66	1.96	1.69	1.46

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(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	54	10	11	11
Yield per acre (bu.)	128.96	120.75	125.43	133.51
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	3.33	3.40	3.40	3.45
Total product return per acre	429.58	410.16	426.40	460.03
Hedging gains/losses per acre	0.17	-	-	0.87
Crop insurance per acre	16.10	10.33	42.18	-
Other crop income per acre	0.20	-	-	0.97
Gross return per acre	446.05	420.48	468.58	461.87
<b>Direct Expenses</b>				
Seed	88.73	109.00	86.76	77.35
Fertilizer	113.95	127.16	106.64	114.81
Crop chemicals	23.11	23.35	19.58	23.39
Crop insurance	19.73	20.68	22.41	11.58
Drying expense	9.93	10.24	22.14	2.86
Fuel & oil	26.25	25.21	25.11	21.87
Repairs	29.24	33.29	23.67	29.38
Custom hire	4.47	4.81	1.64	3.73
Land rent	70.62	71.02	74.81	66.01
Machinery leases	0.20	-	0.56	-
Operating interest	6.39	9.82	10.93	5.34
Miscellaneous	1.19	2.19	-	0.73
Total direct expenses per acre	393.82	436.77	394.27	357.05
Return over direct exp per acre	52.23	-16.28	74.31	104.82
<b>Overhead Expenses</b>				
Hired labor	18.91	27.72	6.89	21.13
Machinery leases	6.16	15.80	4.90	7.82
Building leases	0.67	0.27	2.52	-
Farm insurance	4.41	2.73	8.17	2.84
Utilities	4.04	2.75	4.05	6.38
Dues & professional fees	1.92	1.38	0.98	0.08
Interest	4.15	8.41	5.61	2.34
Mach & bldg depreciation	52.74	58.43	75.42	29.00
Miscellaneous	5.22	4.60	7.88	4.90
Total overhead expenses per acre	98.22	122.07	116.42	74.50
Total dir & ovhd expenses per acre	492.04	558.83	510.69	431.55
Net return per acre	-45.99	-138.35	-42.11	30.32
Government payments	1.71	1.44	1.58	-
Net return with govt pmts	-44.28	-136.91	-40.53	30.32
Labor & management charge	33.78	29.72	37.17	28.67
Net return over lbr & mgt	-78.06	-166.63	-77.70	1.65
<b>Cost of Production</b>				
Total direct expense per bu.	3.05	3.62	3.14	2.67
Total dir & ovhd exp per bu.	3.82	4.63	4.07	3.23
Less govt & other income	3.67	4.53	3.72	3.22
With labor & management	3.94	4.78	4.02	3.43
Net value per unit	3.33	3.40	3.40	3.45
Machinery cost per acre	118.44	137.06	129.46	91.36
Est. labor hours per acre	1.72	1.88	1.53	1.59

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Corn Silage on Owned Land**

	<u>Avg. Of All Farms</u>
Number of farms	10
Yield per acre (ton)	11.77
Operators share of yield %	100.00
Value per ton	31.28
Total product return per acre	368.06
Crop insurance per acre	40.64
Gross return per acre	408.70
<b>Direct Expenses</b>	
Seed	91.10
Fertilizer	106.58
Crop chemicals	19.36
Crop insurance	20.39
Fuel & oil	22.82
Repairs	26.94
Custom hire	73.57
Operating interest	2.31
Miscellaneous	0.62
Total direct expenses per acre	363.69
Return over direct exp per acre	45.00
<b>Overhead Expenses</b>	
Hired labor	10.78
Machinery leases	0.83
RE & pers. property taxes	7.36
Farm insurance	3.10
Utilities	2.87
Dues & professional fees	0.72
Interest	30.83
Mach & bldg depreciation	21.99
Miscellaneous	3.30
Total overhead expenses per acre	81.78
Total dir & ovhd expenses per acre	445.47
Net return per acre	-36.78
Government payments	2.80
Net return with govt pmts	-33.98
Labor & management charge	23.90
Net return over lbr & mgt	-57.88
<b>Cost of Production</b>	
Total direct expense per ton	30.91
Total dir & ovhd exp per ton	37.86
Less govt & other income	34.16
With labor & management	36.19
Net value per unit	31.28
Machinery cost per acre	147.86
Est. labor hours per acre	2.08

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Corn Silage on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of farms	9
Yield per acre (ton)	13.95
Operators share of yield %	100.00
Value per ton	29.68
Total product return per acre	414.20
Crop insurance per acre	3.42
Gross return per acre	417.63
<b>Direct Expenses</b>	
Seed	83.48
Fertilizer	99.74
Crop chemicals	18.02
Crop insurance	18.18
Fuel & oil	26.30
Repairs	21.73
Custom hire	29.74
Land rent	56.37
Operating interest	5.13
Miscellaneous	1.53
Total direct expenses per acre	360.23
Return over direct exp per acre	57.40
<b>Overhead Expenses</b>	
Custom hire	1.78
Hired labor	13.24
Machinery leases	1.43
Building leases	0.17
Farm insurance	3.51
Utilities	3.73
Dues & professional fees	2.58
Interest	1.68
Mach & bldg depreciation	49.60
Miscellaneous	4.58
Total overhead expenses per acre	82.30
Total dir & ovhd expenses per acre	442.52
Net return per acre	-24.90
Government payments	-
Net return with govt pmts	-24.90
Labor & management charge	31.41
Net return over lbr & mgt	-56.30
<b>Cost of Production</b>	
Total direct expense per ton	25.81
Total dir & ovhd exp per ton	31.71
Less govt & other income	31.47
With labor & management	33.72
Net value per unit	29.68
Machinery cost per acre	126.60
Est. labor hours per acre	1.97

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**CRP on Owned Land**

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	<u>Avg. Of</u> <u>All Farms</u>
Number of farms	12
Yield per acre (\$)	47.02
Operators share of yield %	100.00
Value per \$	1.00
Total product return per acre	47.02
Gross return per acre	47.02
<b>Direct Expenses</b>	
Crop chemicals	0.44
Fuel & oil	0.90
Repairs	1.04
Total direct expenses per acre	2.44
Return over direct exp per acre	44.58
<b>Overhead Expenses</b>	
RE & pers. property taxes	7.62
Farm insurance	0.25
Interest	11.60
Mach & bldg depreciation	1.94
Miscellaneous	0.43
Total overhead expenses per acre	21.84
Total dir & ovhd expenses per acre	24.28
Net return per acre	22.74

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Hay, Alfalfa on Owned Land**

	<u>Avg. Of All Farms</u>
Number of farms	14
Yield per acre (ton)	1.95
Operators share of yield %	100.00
Value per ton	60.90
Total product return per acre	118.77
Gross return per acre	118.77
<b>Direct Expenses</b>	
Seed	0.93
Fertilizer	2.25
Crop chemicals	0.28
Crop insurance	4.38
Fuel & oil	13.24
Repairs	14.40
Custom hire	1.71
Machinery leases	0.60
Operating interest	3.28
Miscellaneous	1.50
Total direct expenses per acre	42.57
Return over direct exp per acre	76.20
<b>Overhead Expenses</b>	
Custom hire	0.23
Hired labor	3.00
Machinery leases	0.88
RE & pers. property taxes	5.57
Farm insurance	3.22
Utilities	4.49
Interest	17.71
Mach & bldg depreciation	22.53
Miscellaneous	3.13
Total overhead expenses per acre	60.77
Total dir & ovhd expenses per acre	103.34
Net return per acre	15.43
Government payments	-
Net return with govt pmts	15.43
Labor & management charge	16.34
Net return over lbr & mgt	-0.91
<b>Cost of Production</b>	
Total direct expense per ton	21.83
Total dir & ovhd exp per ton	52.98
Less govt & other income	52.98
With labor & management	61.36
Net value per unit	60.90
Machinery cost per acre	53.65
Est. labor hours per acre	1.09



**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Hay, Alfalfa on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of farms	10
Yield per acre (ton)	2.84
Operators share of yield %	100.00
Value per ton	76.14
Total product return per acre	216.22
Gross return per acre	216.22
<b>Direct Expenses</b>	
Seed	9.88
Fertilizer	5.01
Crop chemicals	2.68
Crop insurance	4.77
Fuel & oil	14.96
Repairs	17.60
Custom hire	3.46
Land rent	51.76
Operating interest	2.39
Miscellaneous	0.57
Total direct expenses per acre	113.10
Return over direct exp per acre	103.12
<b>Overhead Expenses</b>	
Hired labor	9.03
Machinery leases	2.64
Building leases	0.53
Farm insurance	3.31
Utilities	3.03
Dues & professional fees	0.32
Interest	3.46
Mach & bldg depreciation	24.20
Miscellaneous	2.59
Total overhead expenses per acre	49.11
Total dir & ovhd expenses per acre	162.21
Net return per acre	54.01
Government payments	6.28
Net return with govt pmts	60.29
Labor & management charge	18.18
Net return over lbr & mgt	42.11
<b>Cost of Production</b>	
Total direct expense per ton	39.83
Total dir & ovhd exp per ton	57.12
Less govt & other income	54.91
With labor & management	61.31
Net value per unit	76.14
Machinery cost per acre	62.38
Est. labor hours per acre	1.45

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Hay, Grass on Owned Land**

	<b>Avg. Of All Farms</b>
Number of farms	10
Yield per acre (ton)	1.83
Operators share of yield %	100.00
Value per ton	47.10
Total product return per acre	86.40
Gross return per acre	86.40
<b>Direct Expenses</b>	
Fuel & oil	12.48
Repairs	14.95
Operating interest	1.50
Miscellaneous	2.69
Total direct expenses per acre	31.61
Return over direct exp per acre	54.79
<b>Overhead Expenses</b>	
Hired labor	4.50
Machinery leases	0.98
RE & pers. property taxes	2.91
Farm insurance	1.23
Utilities	1.06
Dues & professional fees	0.18
Interest	9.87
Mach & bldg depreciation	16.79
Miscellaneous	2.81
Total overhead expenses per acre	40.32
Total dir & ovhd expenses per acre	71.93
Net return per acre	14.47
Government payments	-
Net return with govt pmts	14.47
Labor & management charge	14.68
Net return over lbr & mgt	-0.20
<b>Cost of Production</b>	
Total direct expense per ton	17.23
Total dir & ovhd exp per ton	39.21
Less govt & other income	39.21
With labor & management	47.21
Net value per unit	47.10
Machinery cost per acre	45.13
Est. labor hours per acre	1.14

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Hay, Grass on Cash Rent**

	<b>Avg. Of All Farms</b>
Number of farms	9
Yield per acre (ton)	1.68
Operators share of yield %	100.00
Value per ton	51.62
Total product return per acre	86.60
Gross return per acre	86.60
<b>Direct Expenses</b>	
Seed	4.02
Fertilizer	2.23
Fuel & oil	14.78
Repairs	17.92
Land rent	17.58
Operating interest	1.66
Miscellaneous	3.42
Total direct expenses per acre	61.61
Return over direct exp per acre	24.99
<b>Overhead Expenses</b>	
Hired labor	9.66
Farm insurance	1.03
Utilities	1.05
Dues & professional fees	1.30
Interest	0.43
Mach & bldg depreciation	17.60
Miscellaneous	1.68
Total overhead expenses per acre	32.75
Total dir & ovhd expenses per acre	94.36
Net return per acre	-7.76
Government payments	-
Net return with govt pmts	-7.76
Labor & management charge	13.68
Net return over lbr & mgt	-21.44
<b>Cost of Production</b>	
Total direct expense per ton	36.72
Total dir & ovhd exp per ton	56.25
Less govt & other income	56.25
With labor & management	64.40
Net value per unit	51.62
Machinery cost per acre	49.92
Est. labor hours per acre	1.18

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Hay, Mixed Alfalfa/Grass on Owned Land**

	<b>Avg. Of All Farms</b>
Number of farms	11
Yield per acre (ton)	2.26
Operators share of yield %	100.00
Value per ton	53.26
Total product return per acre	120.63
Gross return per acre	120.63
<b>Direct Expenses</b>	
Fertilizer	8.92
Crop insurance	1.49
Fuel & oil	10.42
Repairs	8.26
Custom hire	7.32
Operating interest	2.21
Miscellaneous	0.58
Total direct expenses per acre	39.20
Return over direct exp per acre	81.43
<b>Overhead Expenses</b>	
Hired labor	2.10
Machinery leases	0.62
RE & pers. property taxes	4.82
Farm insurance	3.51
Utilities	3.06
Dues & professional fees	0.33
Interest	17.78
Mach & bldg depreciation	16.75
Miscellaneous	4.26
Total overhead expenses per acre	53.24
Total dir & ovhd expenses per acre	92.44
Net return per acre	28.19
Government payments	-
Net return with govt pmts	28.19
Labor & management charge	13.63
Net return over lbr & mgt	14.55
<b>Cost of Production</b>	
Total direct expense per ton	17.31
Total dir & ovhd exp per ton	40.82
Less govt & other income	40.82
With labor & management	46.83
Net value per unit	53.26
Machinery cost per acre	44.68
Est. labor hours per acre	0.76

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Hay, Mixed Alfalfa/Grass on Cash Rent**

	<b>Avg. Of All Farms</b>
Number of farms	14
Yield per acre (ton)	1.81
Operators share of yield %	100.00
Value per ton	54.27
Total product return per acre	98.27
Gross return per acre	98.27
<b>Direct Expenses</b>	
Fertilizer	0.52
Fuel & oil	11.35
Repairs	11.35
Custom hire	0.27
Land rent	26.35
Operating interest	2.35
Miscellaneous	0.57
Total direct expenses per acre	52.76
Return over direct exp per acre	45.51
<b>Overhead Expenses</b>	
Custom hire	0.22
Hired labor	2.08
Machinery leases	0.39
Farm insurance	3.45
Utilities	2.58
Interest	2.49
Mach & bldg depreciation	12.39
Miscellaneous	4.15
Total overhead expenses per acre	27.74
Total dir & ovhd expenses per acre	80.51
Net return per acre	17.77
Government payments	-
Net return with govt pmts	17.77
Labor & management charge	13.22
Net return over lbr & mgt	4.54
<b>Cost of Production</b>	
Total direct expense per ton	29.14
Total dir & ovhd exp per ton	44.46
Less govt & other income	44.46
With labor & management	51.76
Net value per unit	54.27
Machinery cost per acre	37.15
Est. labor hours per acre	0.96

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Pasture on Owned Land**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	33	6	6	7
Yield per acre (aum)	0.94	1.22	0.76	1.15
Operators share of yield %	100.00	100.00	100.00	100.00
Value per aum	24.18	20.41	25.85	25.71
Total product return per acre	22.64	24.94	19.74	29.65
Other crop income per acre	0.54	-	0.03	2.56
Gross return per acre	23.18	24.94	19.76	32.21
<b>Direct Expenses</b>				
Fuel & oil	0.76	2.27	0.55	0.51
Repairs	0.90	3.42	0.52	0.46
Total direct expenses per acre	1.87	6.00	1.25	1.04
Return over direct exp per acre	21.31	18.94	18.51	31.17
<b>Overhead Expenses</b>				
Hired labor	0.23	0.59	0.17	0.07
RE & pers. property taxes	2.29	3.72	1.88	2.79
Farm insurance	0.45	3.33	0.14	0.11
Utilities	0.23	1.02	0.07	0.10
Interest	5.38	15.74	5.16	2.17
Mach & bldg depreciation	0.97	2.94	0.88	0.65
Miscellaneous	0.42	0.61	0.27	0.40
Total overhead expenses per acre	9.97	27.96	8.58	6.30
Total dir & ovhd expenses per acre	11.84	33.95	9.83	7.34
Net return per acre	11.34	-9.02	9.94	24.87

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Pasture on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	37	7	8	8
Yield per acre (aum)	0.90	0.93	0.69	1.33
Operators share of yield %	100.00	100.00	100.00	100.00
Value per aum	22.74	15.45	21.33	25.00
Total product return per acre	20.53	14.36	14.69	33.14
Other crop income per acre	0.09	-	0.13	0.28
Gross return per acre	20.62	14.36	14.82	33.41
<b>Direct Expenses</b>				
Fuel & oil	0.72	1.51	0.45	0.57
Repairs	0.84	2.10	0.71	0.47
Land rent	14.39	14.59	10.93	16.74
Total direct expenses per acre	16.28	18.36	12.66	17.79
Return over direct exp per acre	4.34	-4.00	2.16	15.63
<b>Overhead Expenses</b>				
Farm insurance	0.45	2.58	0.11	0.10
Utilities	0.16	0.58	0.05	0.10
Mach & bldg depreciation	1.06	2.51	0.75	0.93
Miscellaneous	0.75	1.32	0.40	0.66
Total overhead expenses per acre	2.42	7.00	1.32	1.78
Total dir & ovhd expenses per acre	18.70	25.36	13.99	19.57
Net return per acre	1.92	-11.00	0.83	13.84

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Prevented Planting on Owned Land**

	<u>Avg. Of All Farms</u>
Number of farms	19
Yield per acre	-
Operators share of yield %	-
Value	-
Total product return per acre	-
Crop insurance per acre	181.83
Gross return per acre	181.83
<b>Direct Expenses</b>	
Seed	3.41
Fertilizer	1.67
Crop chemicals	3.23
Crop insurance	15.27
Fuel & oil	8.04
Repairs	6.85
Custom hire	0.61
Operating interest	2.04
Total direct expenses per acre	41.12
Return over direct exp per acre	140.71
<b>Overhead Expenses</b>	
Hired labor	4.09
Machinery leases	1.02
RE & pers. property taxes	6.73
Farm insurance	4.15
Utilities	3.22
Dues & professional fees	0.59
Interest	25.25
Mach & bldg depreciation	14.75
Miscellaneous	6.23
Total overhead expenses per acre	66.03
Total dir & ovhd expenses per acre	107.15
Net return per acre	74.68
Government payments	3.01
Net return with govt pmts	77.69
Labor & management charge	8.93
Net return over lbr & mgt	68.76



**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Prevented Planting on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	28	5	5	6
Yield per acre	-	-	-	-
Operators share of yield %	-	-	-	-
Value	-	-	-	-
Total product return per acre	-	-	-	-
Crop insurance per acre	206.70	62.69	166.25	306.45
Gross return per acre	206.70	62.69	166.25	306.45
<b>Direct Expenses</b>				
Seed	2.61	2.48	-	8.04
Fertilizer	0.82	1.69	-	-
Crop chemicals	2.72	5.76	-	0.37
Crop insurance	20.20	9.05	13.53	20.10
Fuel & oil	6.59	4.39	5.74	8.76
Repairs	10.27	5.27	6.62	10.58
Custom hire	0.44	0.52	-	1.66
Land rent	71.40	65.18	64.20	82.37
Operating interest	1.77	0.40	1.41	1.86
Total direct expenses per acre	116.82	94.74	91.50	133.74
Return over direct exp per acre	89.88	-32.05	74.75	172.71
<b>Overhead Expenses</b>				
Hired labor	5.52	3.05	2.52	6.83
Machinery leases	0.84	0.34	1.40	1.71
Farm insurance	3.81	5.04	3.64	3.53
Utilities	3.27	2.00	3.11	2.25
Dues & professional fees	2.01	0.22	0.89	1.47
Interest	2.29	1.70	3.51	2.03
Mach & bldg depreciation	12.25	7.91	11.21	11.52
Miscellaneous	3.58	4.71	5.22	2.42
Total overhead expenses per acre	33.57	24.98	31.49	31.76
Total dir & ovhd expenses per acre	150.39	119.71	122.99	165.50
Net return per acre	56.31	-57.03	43.26	140.95
Government payments	7.69	-	-	14.78
Net return with govt pmts	63.99	-57.03	43.26	155.73
Labor & management charge	10.87	5.29	6.38	10.87
Net return over lbr & mgt	53.12	-62.31	36.88	144.86

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(Farms Sorted By Return to Overhead)**

**Soybeans on Owned Land**

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	53	10	10	11
Yield per acre (bu.)	33.94	29.26	35.22	37.84
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	9.74	9.15	10.27	9.66
Total product return per acre	330.65	267.69	361.67	365.49
Hedging gains/losses per acre	0.91	-	4.27	0.49
Crop insurance per acre	12.12	8.40	6.84	21.92
Other crop income per acre	0.16	-	-	-
Gross return per acre	343.84	276.09	372.79	387.90
<b>Direct Expenses</b>				
Seed	67.27	69.60	71.30	66.87
Fertilizer	16.64	17.49	15.88	13.31
Crop chemicals	23.88	32.67	30.84	18.66
Crop insurance	15.73	19.29	15.40	11.87
Fuel & oil	20.29	25.83	23.75	20.37
Repairs	20.95	38.46	30.33	14.39
Custom hire	7.47	11.98	9.22	5.48
Hired labor	0.55	-	3.09	-
Operating interest	4.57	5.90	5.97	4.75
Miscellaneous	0.63	0.66	1.91	-
Total direct expenses per acre	177.98	221.89	207.69	155.70
Return over direct exp per acre	165.86	54.20	165.10	232.20
<b>Overhead Expenses</b>				
Hired labor	6.24	3.10	6.96	9.45
Machinery leases	2.64	0.95	7.27	2.16
RE & pers. property taxes	7.13	8.84	7.63	7.29
Farm insurance	6.52	7.29	12.01	5.19
Utilities	3.56	3.65	5.70	2.33
Dues & professional fees	0.64	0.88	0.75	0.38
Interest	20.73	26.10	21.73	20.04
Mach & bldg depreciation	32.67	34.89	31.46	30.37
Miscellaneous	8.26	11.68	8.14	9.64
Total overhead expenses per acre	88.39	97.38	101.65	86.84
Total dir & ovhd expenses per acre	266.37	319.26	309.33	242.55
Net return per acre	77.47	-43.18	63.45	145.36
Government payments	2.55	0.36	5.50	2.00
Net return with govt pmts	80.02	-42.82	68.96	147.36
Labor & management charge	22.80	24.38	27.44	21.74
Net return over lbr & mgt	57.22	-67.20	41.52	125.61
<b>Cost of Production</b>				
Total direct expense per bu.	5.24	7.58	5.90	4.12
Total dir & ovhd exp per bu.	7.85	10.91	8.78	6.41
Less govt & other income	7.38	10.61	8.31	5.77
With labor & management	8.06	11.45	9.09	6.34
Net value per unit	9.77	9.15	10.39	9.67
Machinery cost per acre	84.68	112.32	103.87	73.71
Est. labor hours per acre	1.21	1.20	1.88	1.10

**Crop Enterprise Analysis**  
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**(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	75	15	15	15
Yield per acre (bu.)	34.22	29.20	33.86	40.16
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	9.56	9.42	9.79	9.71
Total product return per acre	326.98	275.22	331.61	389.77
Hedging gains/losses per acre	0.34	-	-	1.46
Crop insurance per acre	12.86	10.46	6.18	11.36
Other crop income per acre	0.44	-	-	1.03
Gross return per acre	340.62	285.68	337.79	403.62
<b>Direct Expenses</b>				
Seed	67.52	76.14	59.70	65.66
Fertilizer	16.50	15.80	17.25	13.49
Crop chemicals	23.92	28.19	25.60	23.26
Crop insurance	16.60	19.39	13.12	17.83
Fuel & oil	17.62	20.46	17.89	16.54
Repairs	18.17	27.83	18.38	18.17
Custom hire	4.56	1.76	5.83	5.61
Land rent	73.52	86.68	74.77	69.95
Operating interest	3.81	7.59	2.53	2.60
Miscellaneous	0.61	0.67	0.80	0.16
Total direct expenses per acre	242.82	284.48	235.87	233.27
Return over direct exp per acre	97.80	1.20	101.91	170.35
<b>Overhead Expenses</b>				
Hired labor	9.32	2.41	10.05	10.57
Machinery leases	2.60	1.60	1.51	2.42
Building leases	0.89	1.51	0.94	-
Farm insurance	4.36	7.01	4.38	4.41
Utilities	3.15	4.14	2.74	3.93
Dues & professional fees	1.73	0.94	1.32	1.54
Interest	3.88	5.22	4.03	2.55
Mach & bldg depreciation	30.16	32.09	30.33	24.74
Miscellaneous	5.98	10.58	5.90	4.06
Total overhead expenses per acre	62.09	65.50	61.22	54.23
Total dir & ovhd expenses per acre	304.91	349.99	297.09	287.50
Net return per acre	35.71	-64.31	40.70	116.13
Government payments	1.61	0.70	0.76	3.55
Net return with govt pmts	37.33	-63.61	41.46	119.68
Labor & management charge	21.57	20.30	20.40	25.96
Net return over lbr & mgt	15.76	-83.92	21.06	93.72
<b>Cost of Production</b>				
Total direct expense per bu.	7.10	9.74	6.97	5.81
Total dir & ovhd exp per bu.	8.91	11.98	8.77	7.16
Less govt & other income	8.46	11.60	8.57	6.73
With labor & management	9.10	12.30	9.17	7.37
Net value per unit	9.57	9.42	9.79	9.74
Machinery cost per acre	74.92	86.02	75.65	68.75
Est. labor hours per acre	1.10	1.05	1.02	1.23

**Crop Enterprise Analysis**  
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**(Farms Sorted By Return to Overhead)**

**Soybeans on Share Rent**

	<u>Avg. Of All Farms</u>
Number of farms	14
Yield per acre (bu.)	30.46
Operators share of yield %	70.00
Value per bu.	9.56
Total product return per acre	203.88
Crop insurance per acre	1.02
Gross return per acre	204.89
<b>Direct Expenses</b>	
Seed	77.05
Fertilizer	15.29
Crop chemicals	22.14
Crop insurance	11.68
Fuel & oil	15.29
Repairs	18.12
Custom hire	3.27
Operating interest	4.52
Miscellaneous	0.18
Total direct expenses per acre	167.56
Return over direct exp per acre	37.34
<b>Overhead Expenses</b>	
Hired labor	4.91
Machinery leases	0.72
Farm insurance	3.92
Utilities	3.24
Dues & professional fees	0.38
Interest	4.26
Mach & bldg depreciation	23.17
Miscellaneous	6.35
Total overhead expenses per acre	46.95
Total dir & ovhd expenses per acre	214.51
Net return per acre	-9.62
Government payments	0.71
Net return with govt pmts	-8.91
Labor & management charge	21.17
Net return over lbr & mgt	-30.08
<b>Cost of Production</b>	
Total direct expense per bu.	7.86
Total dir & ovhd exp per bu.	10.06
Less govt & other income	9.98
With labor & management	10.97
Net value per unit	9.56
Machinery cost per acre	63.16
Est. labor hours per acre	0.96

**Crop Enterprise Analysis**  
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**Sunflowers on Owned Land**

	<u>Avg. Of All Farms</u>
Number of farms	9
Yield per acre (cwt.)	9.30
Operators share of yield %	100.00
Value per cwt.	18.35
Total product return per acre	170.68
Crop insurance per acre	96.93
Other crop income per acre	0.44
Gross return per acre	268.05
<b>Direct Expenses</b>	
Seed	36.84
Fertilizer	61.27
Crop chemicals	54.15
Crop insurance	9.65
Fuel & oil	22.09
Repairs	12.27
Custom hire	4.73
Operating interest	1.92
Miscellaneous	0.63
Total direct expenses per acre	203.56
Return over direct exp per acre	64.50
<b>Overhead Expenses</b>	
Hired labor	3.44
Machinery leases	3.76
RE & pers. property taxes	4.19
Farm insurance	5.24
Utilities	3.75
Interest	11.53
Mach & bldg depreciation	48.02
Miscellaneous	9.95
Total overhead expenses per acre	89.87
Total dir & ovhd expenses per acre	293.43
Net return per acre	-25.38
Government payments	-
Net return with govt pmts	-25.38
Labor & management charge	21.48
Net return over lbr & mgt	-46.85
<b>Cost of Production</b>	
Total direct expense per cwt.	21.88
Total dir & ovhd exp per cwt.	31.54
Less govt & other income	21.08
With labor & management	23.38
Net value per unit	18.35
Machinery cost per acre	86.26
Est. labor hours per acre	0.93

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
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**(Farms Sorted By Return to Overhead)**

**Sunflowers on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of farms	13
Yield per acre (cwt.)	11.04
Operators share of yield %	100.00
Value per cwt.	19.60
Total product return per acre	216.29
Crop insurance per acre	52.18
Other crop income per acre	0.29
Gross return per acre	268.76
<b>Direct Expenses</b>	
Seed	39.57
Fertilizer	59.15
Crop chemicals	51.86
Crop insurance	14.98
Fuel & oil	19.77
Repairs	18.44
Custom hire	8.38
Land rent	58.91
Operating interest	3.09
Miscellaneous	0.30
Total direct expenses per acre	274.45
Return over direct exp per acre	-5.68
<b>Overhead Expenses</b>	
Custom hire	0.67
Hired labor	3.60
Machinery leases	4.21
Farm insurance	5.75
Utilities	3.59
Interest	1.87
Mach & bldg depreciation	36.67
Miscellaneous	11.03
Total overhead expenses per acre	67.38
Total dir & ovhd expenses per acre	341.83
Net return per acre	-73.07
Government payments	-
Net return with govt pmts	-73.07
Labor & management charge	21.05
Net return over lbr & mgt	-94.12
<b>Cost of Production</b>	
Total direct expense per cwt.	24.87
Total dir & ovhd exp per cwt.	30.97
Less govt & other income	26.22
With labor & management	28.13
Net value per unit	19.60
Machinery cost per acre	85.28
Est. labor hours per acre	1.03

**Crop Enterprise Analysis**  
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**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	34	6	7	7
Yield per acre (bu.)	58.24	46.92	58.79	68.51
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	5.49	4.40	5.75	5.49
Total product return per acre	319.96	206.60	338.27	376.08
Hedging gains/losses per acre	0.87	-	3.30	0.27
Crop insurance per acre	0.90	-	2.82	1.27
Other crop income per acre	0.53	-	0.35	2.96
Gross return per acre	322.25	206.60	344.76	380.58
<b>Direct Expenses</b>				
Seed	20.17	21.34	17.11	17.09
Fertilizer	72.48	65.05	69.58	62.18
Crop chemicals	31.28	33.50	33.76	32.63
Crop insurance	13.50	15.00	13.71	13.69
Drying expense	0.91	1.78	2.27	0.22
Fuel & oil	18.85	13.33	21.92	20.06
Repairs	16.38	12.05	20.80	18.19
Custom hire	12.35	41.52	3.92	1.67
Hired labor	0.42	-	1.67	-
Operating interest	2.31	1.27	1.65	1.56
Miscellaneous	0.40	0.86	0.47	-
Total direct expenses per acre	189.05	205.69	186.87	167.29
Return over direct exp per acre	133.20	0.91	157.88	213.29
<b>Overhead Expenses</b>				
Hired labor	7.06	0.50	5.87	6.91
Machinery leases	1.10	0.33	1.22	2.48
Building leases	0.50	0.03	1.97	-
RE & pers. property taxes	5.70	7.13	4.87	5.60
Farm insurance	4.40	3.82	5.70	3.38
Utilities	3.41	3.84	3.75	3.26
Dues & professional fees	0.66	0.35	1.09	0.56
Interest	12.33	2.80	13.37	14.33
Mach & bldg depreciation	31.20	27.37	39.15	25.19
Miscellaneous	7.49	3.36	11.60	4.42
Total overhead expenses per acre	73.85	49.53	88.59	66.13
Total dir & ovhd expenses per acre	262.90	255.22	275.46	233.42
Net return per acre	59.35	-48.62	69.30	147.16
Government payments	0.23	-	-	-
Net return with govt pmts	59.58	-48.62	69.30	147.16
Labor & management charge	22.04	23.19	18.43	21.06
Net return over lbr & mgt	37.54	-71.81	50.86	126.11
<b>Cost of Production</b>				
Total direct expense per bu.	3.25	4.38	3.18	2.44
Total dir & ovhd exp per bu.	4.51	5.44	4.69	3.41
Less govt & other income	4.47	5.44	4.58	3.34
With labor & management	4.85	5.93	4.89	3.65
Net value per unit	5.51	4.40	5.81	5.49
Machinery cost per acre	79.42	95.62	84.97	67.35
Est. labor hours per acre	1.14	1.24	1.00	0.96

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2014**  
**(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	42	8	9	9
Yield per acre (bu.)	60.02	57.43	57.17	63.71
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	5.71	5.02	5.56	6.14
Total product return per acre	342.69	288.22	317.57	390.96
Hedging gains/losses per acre	0.63	-	-	-
Crop insurance per acre	7.06	-	1.78	12.32
Other crop income per acre	0.53	-	0.58	-
Gross return per acre	350.91	288.22	319.93	403.28
<b>Direct Expenses</b>				
Seed	20.59	30.83	16.75	22.82
Fertilizer	74.33	81.75	70.32	70.11
Crop chemicals	35.09	41.18	36.52	31.85
Crop insurance	12.92	15.54	10.31	12.38
Drying expense	0.63	0.04	1.20	0.07
Fuel & oil	17.36	18.69	16.80	16.70
Repairs	17.67	21.15	11.83	17.80
Custom hire	5.61	10.71	7.78	2.62
Land rent	60.77	73.40	57.75	61.40
Machinery leases	0.06	0.52	-	-
Operating interest	3.23	5.29	1.97	3.77
Miscellaneous	1.21	0.97	-	2.59
Total direct expenses per acre	249.48	300.08	231.22	242.10
Return over direct exp per acre	101.43	-11.86	88.71	161.18
<b>Overhead Expenses</b>				
Hired labor	9.18	16.32	7.02	9.68
Machinery leases	3.63	7.45	2.66	1.97
Building leases	0.63	0.09	1.98	-
Farm insurance	3.97	5.26	3.31	4.29
Utilities	4.58	2.37	4.28	6.08
Dues & professional fees	0.75	0.43	1.15	0.77
Interest	2.71	8.02	1.75	1.86
Mach & bldg depreciation	26.74	34.04	24.31	26.54
Miscellaneous	6.53	5.18	9.45	4.09
Total overhead expenses per acre	58.73	79.16	55.90	55.29
Total dir & ovhd expenses per acre	308.21	379.24	287.12	297.39
Net return per acre	42.70	-91.02	32.80	105.90
Government payments	0.66	-	1.05	-
Net return with govt pmts	43.36	-91.02	33.86	105.90
Labor & management charge	20.43	19.40	18.84	21.85
Net return over lbr & mgt	22.94	-110.41	15.02	84.04
<b>Cost of Production</b>				
Total direct expense per bu.	4.16	5.23	4.04	3.80
Total dir & ovhd exp per bu.	5.14	6.60	5.02	4.67
Less govt & other income	4.99	6.60	4.96	4.47
With labor & management	5.33	6.94	5.29	4.82
Net value per unit	5.72	5.02	5.56	6.14
Machinery cost per acre	71.48	99.58	63.07	64.28
Est. labor hours per acre	0.96	1.25	0.85	0.78



**Crop Enterprise Analysis**  
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**(Farms Sorted By Return to Overhead)**

**Wheat, Spring on Share Rent**

	<u>Avg. Of All Farms</u>
Number of farms	11
Yield per acre (bu.)	56.12
Operators share of yield %	69.45
Value per bu.	5.38
Total product return per acre	209.56
Crop insurance per acre	2.97
Gross return per acre	212.52
<b>Direct Expenses</b>	
Seed	19.44
Fertilizer	58.88
Crop chemicals	26.22
Crop insurance	14.39
Fuel & oil	15.17
Repairs	17.00
Custom hire	10.81
Operating interest	3.61
Miscellaneous	0.82
Total direct expenses per acre	166.34
Return over direct exp per acre	46.18
<b>Overhead Expenses</b>	
Hired labor	3.45
Machinery leases	0.42
Farm insurance	3.56
Utilities	2.90
Dues & professional fees	0.47
Interest	3.16
Mach & bldg depreciation	19.00
Miscellaneous	6.65
Total overhead expenses per acre	39.61
Total dir & ovhd expenses per acre	205.95
Net return per acre	6.57
Government payments	0.37
Net return with govt pmts	6.94
Labor & management charge	19.43
Net return over lbr & mgt	-12.49
<b>Cost of Production</b>	
Total direct expense per bu.	4.27
Total dir & ovhd exp per bu.	5.28
Less govt & other income	5.20
With labor & management	5.70
Net value per unit	5.38
Machinery cost per acre	64.83
Est. labor hours per acre	1.01

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
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**(Farms Sorted By Return to Overhead)**

**Wheat, Winter on Owned Land**

	<u>Avg. Of All Farms</u>
Number of farms	6
Yield per acre (bu.)	47.90
Operators share of yield %	100.00
Value per bu.	4.12
Total product return per acre	197.37
Crop insurance per acre	11.77
Gross return per acre	209.14
<b>Direct Expenses</b>	
Seed	16.33
Fertilizer	66.26
Crop chemicals	36.47
Crop insurance	6.83
Fuel & oil	16.31
Repairs	19.59
Custom hire	16.59
Operating interest	3.27
Miscellaneous	1.02
Total direct expenses per acre	182.75
Return over direct exp per acre	26.38
<b>Overhead Expenses</b>	
Hired labor	9.07
Machinery leases	1.30
RE & pers. property taxes	4.13
Farm insurance	4.17
Utilities	5.54
Interest	14.58
Mach & bldg depreciation	24.10
Miscellaneous	6.60
Total overhead expenses per acre	69.50
Total dir & ovhd expenses per acre	252.25
Net return per acre	-43.11
Government payments	-
Net return with govt pmts	-43.11
Labor & management charge	18.03
Net return over lbr & mgt	-61.14
<b>Cost of Production</b>	
Total direct expense per bu.	3.82
Total dir & ovhd exp per bu.	5.27
Less govt & other income	5.02
With labor & management	5.40
Net value per unit	4.12
Machinery cost per acre	75.30
Est. labor hours per acre	1.35

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
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**(Farms Sorted By Return to Overhead)**

**Wheat, Winter on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of farms	8
Yield per acre (bu.)	47.62
Operators share of yield %	100.00
Value per bu.	4.42
Total product return per acre	210.57
Crop insurance per acre	2.83
Other crop income per acre	0.07
Gross return per acre	213.48
<b>Direct Expenses</b>	
Seed	17.90
Fertilizer	69.30
Crop chemicals	36.02
Crop insurance	9.64
Fuel & oil	16.92
Repairs	13.41
Custom hire	8.89
Land rent	43.22
Operating interest	3.66
Miscellaneous	0.81
Total direct expenses per acre	219.75
Return over direct exp per acre	-6.27
<b>Overhead Expenses</b>	
Custom hire	1.43
Hired labor	6.67
Machinery leases	0.66
Farm insurance	3.58
Utilities	4.05
Interest	2.79
Mach & bldg depreciation	24.42
Miscellaneous	6.43
Total overhead expenses per acre	50.03
Total dir & ovhd expenses per acre	269.77
Net return per acre	-56.30
Government payments	-
Net return with govt pmts	-56.30
Labor & management charge	17.91
Net return over lbr & mgt	-74.21
<b>Cost of Production</b>	
Total direct expense per bu.	4.61
Total dir & ovhd exp per bu.	5.67
Less govt & other income	5.60
With labor & management	5.98
Net value per unit	4.42
Machinery cost per acre	64.97
Est. labor hours per acre	1.09

## EXPLANATORY NOTES FOR LIVESTOCK TABLES

The "Livestock Enterprise Analysis" table shows the average physical production, gross returns, direct costs, overhead costs, and net return per unit. All costs are actual costs; no opportunity costs are included. The "Net Return" to the enterprise is the "Gross Margin" minus the direct and overhead costs. "Net Return" represents the return to the operators and family's unpaid labor, management, and equity. It represents the return to all of the resources, which are owned by the farm family and hence, not purchased or paid a wage. The last section of each livestock table contains both economic and technical efficiency measures, which are particularly useful to individual managers in assessing their performance as compared to their peers.

When there are less than five farms with a particular livestock enterprise, that enterprise is not included in the report. When there is a sufficient number (i.e., more than 24), farms are divided into low 20%, middle 20% and high 20% on the basis of returns to overhead costs. The classification is done separately for each livestock enterprise.

The "Dairy" enterprise contains the information for only the milking herd (which includes dry cows). "Dairy Replacement Heifers" are those heifers kept for replacement into the milking herd. "Dairy Heifers (for sale)" are heifers intended for feeding and sale. "Dairy Steers" includes only steers for feeding. The "Dairy and Replacement Heifers" table includes both "Dairy" and "Dairy Replacement Heifers."

"Lbs. feed per lb. of gain" is the lbs. of total feed divided by total gain. The total feed is calculated by adding total pounds of feed. For grains, these pounds per unit are used: corn, 56; oats, 32; barley, 48; grain sorghum, 56; wheat, 60; and millet, 48. For these roughages, the pounds are calculated by these factors: alfalfa haylage, 0.5; corn silage, 0.33; oatlage, 0.5; and sorghum silage, 0.33; and small grain silage, 0.33.

The calving and weaning percentages are calculated as the number of calves, which are calved and weaned, respectively, divided by the number of cows, which are supposed to bear young.

Rounding of individual items for the report has caused minor discrepancies with the calculated totals.

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**Beef Cow-Calf -- Average Per Cwt. Produced**

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>40 - 60%</u>		<u>High 20%</u>	
	25		5		5		5	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms								
Beef Calves sold (lb)	38.64	98.02	44.74	117.14	13.51	36.18	35.79	92.23
Transferred out (lb)	61.36	155.90	55.26	130.40	86.49	223.75	64.21	168.52
Cull sales		41.20		12.77		35.32		35.80
Other income		0.46		1.83		-		-
Purchased		-38.47		-64.23		-31.12		-23.74
Transferred in		-28.63		-36.04		-25.23		-4.63
Inventory change		17.96		72.70		12.43		-6.87
Gross margin		246.79		234.57		251.32		261.31
<b>Direct Expenses</b>								
Protein Vit Minerals (lb.)	13.36	3.58	25.53	6.02	18.84	5.74	10.74	3.24
Creep / Starter (lb.)	21.33	2.57	24.03	1.80	-	-	37.71	4.87
Corn (bu.)	0.27	1.17	0.06	0.15	0.21	0.83	0.61	2.93
Corn Silage (lb.)	299.35	4.60	-	-	204.81	3.28	445.91	7.61
Hay, Alfalfa (lb.)	107.73	3.37	97.77	2.44	-	-	187.83	6.89
Hay, Grass (lb.)	1,384.93	33.98	1,825.65	47.34	1,380.43	41.79	1,015.40	23.48
Pasture (aum)	1.29	25.23	1.23	26.01	1.25	27.96	1.21	22.35
Other feed stuffs (lb)	70.45	2.31	15.17	0.71	-	-	75.43	3.05
Veterinary		4.19		3.84		6.03		3.39
Supplies		3.43		1.08		2.94		5.56
Fuel & oil		5.29		5.65		6.04		3.96
Repairs		5.02		4.88		6.61		2.06
Custom hire		2.29		0.75		2.95		1.34
Livestock leases		5.73		31.05		5.53		-
Bedding		0.81		-		-		1.89
Operating interest		1.74		1.32		3.79		1.59
Total direct expenses		105.31		133.06		113.49		94.19
Return over direct expense		141.47		101.51		137.84		167.11
<b>Overhead Expenses</b>								
Hired labor		2.32		0.59		0.72		3.44
Farm insurance		2.51		3.79		3.05		1.80
Utilities		1.85		3.00		2.10		1.78
Interest		2.84		3.79		4.59		1.13
Mach & bldg depreciation		6.74		5.04		6.84		7.84
Miscellaneous		3.86		5.45		3.77		4.47
Total overhead expenses		20.13		21.67		21.08		20.46
Total dir & ovhd expenses		125.45		154.73		134.57		114.65
Net return		121.34		79.84		116.75		146.65
Labor & management charge		12.92		14.92		10.81		10.38
Net return over lbr & mgt		108.43		64.93		105.95		136.27
<b>Cost of Production Per Cwt. Produced</b>								
Total direct expense per unit		105.31		133.06		113.49		94.19
Total dir & ovhd expense per unit		125.45		154.73		134.57		114.65
With other revenue adjustments		133.04		169.53		143.17		114.19
With labor and management		145.95		184.45		153.98		124.56
Est. labor hours per unit		0.91		1.03		0.96		0.55
<b>Other Information</b>								
Number of cows		166.8		134.6		99.0		220.3
Pregnancy percentage		97.8		96.5		93.1		99.7
Pregnancy loss percentage		0.7		-		1.0		1.9
Culling percentage		16.1		6.8		13.5		15.8
Calving percentage		97.2		96.5		92.2		97.7
Weaning percentage		90.3		88.0		86.6		91.6
Calves sold per cow		0.92		0.89		0.96		0.95
Calf death loss percent		6.9		8.6		6.0		6.2
Cow death loss percent		2.3		1.8		0.8		2.2
Average weaning weight		565		559		536		613
Lb. weaned/exposed female		510		492		464		562
Feed cost per cow		398.09		417.78		392.54		435.11
Avg wgt/ Beef Calves sold		594		551		541		628
Avg price / cwt.		253.71		261.81		267.82		257.68

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**Beef Cow-Calf -- Average Per Cow**

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>40 - 60%</u>		<u>High 20%</u>	
	25		5		5		5	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms								
Beef Calves sold (lb)	200.2	507.98	221.3	579.31	66.6	178.42	209.3	539.36
Transferred out (lb)	318.0	807.91	273.3	644.87	426.6	1,103.49	375.5	985.52
Cull sales		213.51		63.15		174.21		209.35
Other income		2.40		9.06		-		-
Purchased		-199.38		-317.62		-153.50		-138.85
Transferred in		-148.39		-178.25		-124.44		-27.05
Inventory change		93.10		359.53		61.31		-40.20
Gross margin		1,278.94		1,160.04		1,239.49		1,528.13
<b>Direct Expenses</b>								
Protein Vit Minerals (lb.)	69.2	18.54	126.3	29.77	92.9	28.31	62.8	18.96
Creep / Starter (lb.)	110.5	13.34	118.8	8.91	-	-	220.5	28.46
Corn (bu.)	1.4	6.07	0.3	0.74	1.1	4.07	3.6	17.11
Corn Silage (lb.)	1,551.3	23.82	-	-	1,010.1	16.16	2,607.7	44.48
Hay, Alfalfa (lb.)	558.3	17.46	483.5	12.09	-	-	1,098.5	40.29
Hay, Grass (lb.)	7,177.2	176.10	9,028.5	234.14	6,808.1	206.11	5,938.1	137.28
Pasture (aum)	6.7	130.77	6.1	128.64	6.1	137.89	7.1	130.67
Other feed stuffs (lb)	365.1	11.98	75.0	3.49	-	-	441.1	17.85
Veterinary		21.70		18.99		29.76		19.81
Supplies		17.80		5.37		14.50		32.52
Fuel & oil		27.40		27.96		29.81		23.16
Repairs		26.00		24.14		32.62		12.06
Custom hire		11.85		3.72		14.55		7.83
Livestock leases		29.70		153.54		27.27		-
Bedding		4.21		-		-		11.04
Operating interest		9.03		6.54		18.67		9.31
Total direct expenses		545.77		658.04		559.71		550.85
Return over direct expense		733.17		502.00		679.78		977.28
<b>Overhead Expenses</b>								
Hired labor		12.03		2.93		3.54		20.10
Farm insurance		13.01		18.77		15.07		10.50
Utilities		9.60		14.83		10.37		10.43
Interest		14.73		18.74		22.64		6.62
Mach & bldg depreciation		34.95		24.94		33.74		45.86
Miscellaneous		20.00		26.95		18.61		26.14
Total overhead expenses		104.33		107.15		103.97		119.65
Total dir & ovhd expenses		650.10		765.19		663.67		670.50
Net return		628.84		394.85		575.81		857.63
Labor & management charge		66.93		73.77		53.31		60.69
Net return over lbr & mgt		561.91		321.08		522.51		796.94
<b>Cost of Production Per Cwt. Produced</b>								
Total direct expense per unit		105.31		133.06		113.49		94.19
Total dir & ovhd expense per unit		125.45		154.73		134.57		114.65
With other revenue adjustments		133.04		169.53		143.17		114.19
With labor and management		145.95		184.45		153.98		124.56
Est. labor hours per unit		4.71		5.07		4.73		3.20
<b>Other Information</b>								
Number of cows		166.8		134.6		99.0		220.3
Pregnancy percentage		97.8		96.5		93.1		99.7
Pregnancy loss percentage		0.7		-		1.0		1.9
Culling percentage		16.1		6.8		13.5		15.8
Calving percentage		97.2		96.5		92.2		97.7
Weaning percentage		90.3		88.0		86.6		91.6
Calves sold per cow		0.92		0.89		0.96		0.95
Calf death loss percent		6.9		8.6		6.0		6.2
Cow death loss percent		2.3		1.8		0.8		2.2
Average weaning weight		565		559		536		613
Lb. weaned/exposed female		510		492		464		562
Feed cost per cow		398.09		417.78		392.54		435.11
Avg wgt/ Beef Calves sold		594		551		541		628
Avg price / cwt.		253.71		261.81		267.82		257.68

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**Beef Cow-Calf Whole Herd w/Backgrounding -- Average Per Cwt. Produced**

	<u>Avg. Of All Farms</u>	
Number of farms	14	
	Quantity	Value
Beef Calves sold (lb)	54.06	111.83
Transferred out (lb)	44.05	99.46
Cull sales		24.17
Other income		0.52
Purchased		-6.52
Transferred in		-32.47
Inventory change		39.52
Gross margin		236.52
<b>Direct Expenses</b>		
Creep / Starter (lb.)	13.43	1.21
Complete Ration (lb.)	174.58	6.56
Corn (bu.)	1.18	3.93
Corn Silage (lb.)	731.82	11.32
Hay, Grass (lb.)	1,101.27	31.17
Pasture (aum)	1.07	23.46
Stover (lb.)	165.31	3.30
DDGS, dry (lb.)	13.43	3.13
Other feed stuffs (lb)	169.13	8.73
Veterinary		3.45
Supplies		1.83
Fuel & oil		6.13
Repairs		6.60
Custom hire		3.14
Marketing		1.36
Operating interest		1.24
Total direct expenses		116.54
Return over direct expense		119.98
<b>Overhead Expenses</b>		
Hired labor		1.79
Farm insurance		2.40
Utilities		2.89
Interest		1.70
Mach & bldg depreciation		9.37
Miscellaneous		3.47
Total overhead expenses		21.63
Total dir & ovhd expenses		138.18
Net return		98.34
Labor & management charge		14.09
Net return over lbr & mgt		84.25
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		116.54
Total dir & ovhd expense per unit		138.18
With other revenue adjustments		138.68
With labor and management		152.78
Est. labor hours per unit		1.13
<b>Other Information</b>		
Number of cows		97.5
Pregnancy percentage		97.5
Pregnancy loss percentage		10.8
Culling percentage		9.6
Calving percentage		87.0
Weaning percentage		82.0
Calves sold per cow		0.85
Calf death loss percent		6.4
Cow death loss percent		1.8
Average weaning weight		550
Lb. weaned/exposed female		451
Feed cost per cow		506.23
Avg wgt/ Beef Calves sold		639
Avg price / cwt.		206.87

**Livestock Enterprise Analysis**  
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**(Farms Sorted By Return to Overhead)**

**Beef Cow-Calf Whole Herd w/Backgrounding -- Average Per Cow**

	<u>Avg. Of All Farms</u>	
Number of farms	14	
	Quantity	Value
Beef Calves sold (lb)	294.9	610.05
Transferred out (lb)	240.3	542.60
Cull sales		131.88
Other income		2.86
Purchased		-35.57
Transferred in		-177.14
Inventory change		215.57
Gross margin		1,290.24
<b>Direct Expenses</b>		
Creep / Starter (lb.)	73.3	6.59
Complete Ration (lb.)	952.4	35.81
Corn (bu.)	6.4	21.43
Corn Silage (lb.)	3,992.2	61.73
Hay, Grass (lb.)	6,007.6	170.03
Pasture (aum)	5.8	127.96
Stover (lb.)	901.8	18.02
DDGS, dry (lb.)	73.3	17.06
Other feed stuffs (lb)	922.6	47.60
Veterinary		18.82
Supplies		9.99
Fuel & oil		33.43
Repairs		35.98
Custom hire		17.13
Marketing		7.43
Operating interest		6.75
Total direct expenses		635.75
Return over direct expense		654.49
<b>Overhead Expenses</b>		
Hired labor		9.75
Farm insurance		13.11
Utilities		15.78
Interest		9.28
Mach & bldg depreciation		51.14
Miscellaneous		18.95
Total overhead expenses		118.01
Total dir & ovhd expenses		753.77
Net return		536.47
Labor & management charge		76.88
Net return over lbr & mgt		459.59
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		116.54
Total dir & ovhd expense per unit		138.18
With other revenue adjustments		138.68
With labor and management		152.78
Est. labor hours per unit		6.18
<b>Other Information</b>		
Number of cows		97.5
Pregnancy percentage		97.5
Pregnancy loss percentage		10.8
Culling percentage		9.6
Calving percentage		87.0
Weaning percentage		82.0
Calves sold per cow		0.85
Calf death loss percent		6.4
Cow death loss percent		1.8
Average weaning weight		550
Lb. weaned/exposed female		451
Feed cost per cow		506.23
Avg wgt/ Beef Calves sold		639
Avg price / cwt.		206.87



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**Beef Replacement Heifers -- Average Per Head Sold/Trans**

	<u>Avg. Of All Farms</u>	
Number of farms	19	
	Quantity	Value
Beef Replace sold (hd)	0.3	688.98
Transferred out (hd)	0.7	1,598.23
Cull sales (hd)	0.0	4.30
Other income		-
Purchased (hd)	0.3	-321.52
Transferred in (hd)	0.5	-496.86
Inventory change (hd)	-0.2	-252.18
Gross margin		1,220.97
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	119.9	14.19
Complete Ration (lb.)	466.3	19.03
Corn (bu.)	3.7	16.36
Corn Silage (lb.)	1,485.6	22.50
Hay, Grass (lb.)	2,356.5	63.20
Oats (bu.)	0.4	0.88
Pasture (aum)	4.4	84.07
DDGS, dry (lb.)	335.2	18.01
Other feed stuffs (lb)	398.7	15.02
Breeding fees		7.57
Veterinary		16.60
Supplies		10.58
Fuel & oil		10.82
Repairs		5.73
Custom hire		8.62
Total direct expenses		313.18
Return over direct expense		907.79
<b>Overhead Expenses</b>		
Hired labor		15.21
Dues & professional fees		7.17
Interest		2.17
Mach & bldg depreciation		21.59
Miscellaneous		13.04
Total overhead expenses		59.18
Total dir & ovhd expenses		372.36
Net return		848.60
Labor & management charge		28.20
Net return over lbr & mgt		820.40
Est. labor hours per unit		1.62
<b>Other Information</b>		
No. purchased or trans in		46
Number sold or trans out		58
Average number of head		53
Percentage death loss		0.9
Feed cost per average head		276.17
Feed cost/head sold/trans		253.26

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**Beef Backgrounding -- Average Per Cwt. Produced**

	<u>Avg. Of</u>	
	<u>All Farms</u>	
Number of farms	5	
	Quantity	Value
Backgnd Beef sold (lb)	237.86	496.15
Transferred out (lb)	230.80	494.89
Other income		4.89
Purchased (lb)	-64.08	-167.11
Transferred in (lb)	-306.98	-779.38
Inventory change (lb)	2.40	5.53
Gross margin		54.95
<b>Direct Expenses</b>		
Midds (lb.)	32.04	1.59
Protein Vit Minerals (lb.)	6.27	1.80
Creep / Starter (lb.)	30.28	3.58
Complete Ration (lb.)	82.39	6.18
Corn (bu.)	5.40	15.37
Corn Silage (lb.)	706.38	10.85
Hay, Grass (lb.)	482.96	13.71
Screenings, Heavy (lb.)	53.61	1.81
Other feed stuffs (lb)	21.00	0.67
Veterinary		3.90
Supplies		0.29
Fuel & oil		2.86
Repairs		1.96
Custom hire		2.00
Marketing		8.82
Bedding		1.06
Operating interest		1.62
Total direct expenses		78.06
Return over direct expense		-23.11
<b>Overhead Expenses</b>		
Hired labor		1.64
Farm insurance		1.06
Utilities		1.43
Interest		1.61
Mach & bldg depreciation		4.72
Miscellaneous		2.19
Total overhead expenses		12.66
Total dir & ovhd expenses		90.71
Net return		-35.76
Labor & management charge		7.22
Net return over lbr & mgt		-42.98
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		217.43
Total dir & ovhd expense per unit		220.14
With other revenue adjustments		219.09
With labor and management		220.63
Est. labor hours per unit		0.37
<b>Other Information</b>		
No. purchased or trans in		220
Number sold or trans out		217
Percentage death loss		0.5
Avg. daily gain (lb.)		2.07
Lb. of conc / lb. of gain		5.19
Lb. of feed / lb. of gain		12.47
Feed cost per cwt. of gain		55.56
Feed cost per head		93.81
Avg wgt / Backgnd Beef sold		799
Avg sales price / cwt.		208.59

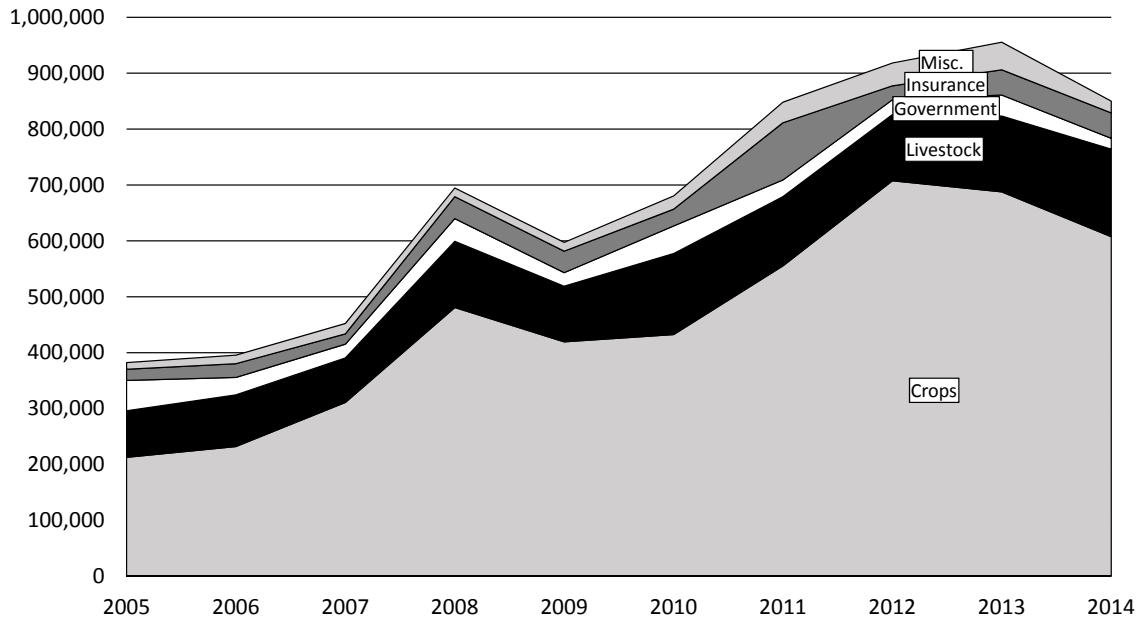
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**Beef Backgrounding -- Average Per Head**

	<u>Avg. Of</u>	
	<u>All Farms</u>	
Number of farms	5	
	Quantity	Value
Backgnd Beef sold (lb)	401.7	837.80
Transferred out (lb)	389.7	835.67
Other income		8.25
Purchased (lb)	-108.2	-282.19
Transferred in (lb)	-518.4	-1,316.08
Inventory change (lb)	4.1	9.33
Gross margin		92.80
<b>Direct Expenses</b>		
Midds (lb.)	54.1	2.68
Protein Vit Minerals (lb.)	10.6	3.04
Creep / Starter (lb.)	51.1	6.04
Complete Ration (lb.)	139.1	10.43
Corn (bu.)	9.1	25.95
Corn Silage (lb.)	1,192.8	18.33
Hay, Grass (lb.)	815.5	23.14
Screenings, Heavy (lb.)	90.5	3.06
Other feed stuffs (lb)	35.5	1.13
Veterinary		6.59
Supplies		0.48
Fuel & oil		4.82
Repairs		3.31
Custom hire		3.38
Marketing		14.89
Bedding		1.79
Operating interest		2.73
Total direct expenses		131.81
Return over direct expense		-39.02
<b>Overhead Expenses</b>		
Hired labor		2.78
Farm insurance		1.80
Utilities		2.42
Interest		2.72
Mach & bldg depreciation		7.97
Miscellaneous		3.69
Total overhead expenses		21.37
Total dir & ovhd expenses		153.18
Net return		-60.39
Labor & management charge		12.19
Net return over lbr & mgt		-72.57
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		217.43
Total dir & ovhd expense per unit		220.14
With other revenue adjustments		219.09
With labor and management		220.63
Est. labor hours per unit		0.62
<b>Other Information</b>		
No. purchased or trans in		220
Number sold or trans out		217
Percentage death loss		0.5
Avg. daily gain (lb.)		2.07
Lb. of conc / lb. of gain		5.19
Lb. of feed / lb. of gain		12.47
Feed cost per cwt. of gain		55.56
Feed cost per head		93.81
Avg wgt / Backgnd Beef sold		799
Avg sales price / cwt.		208.59

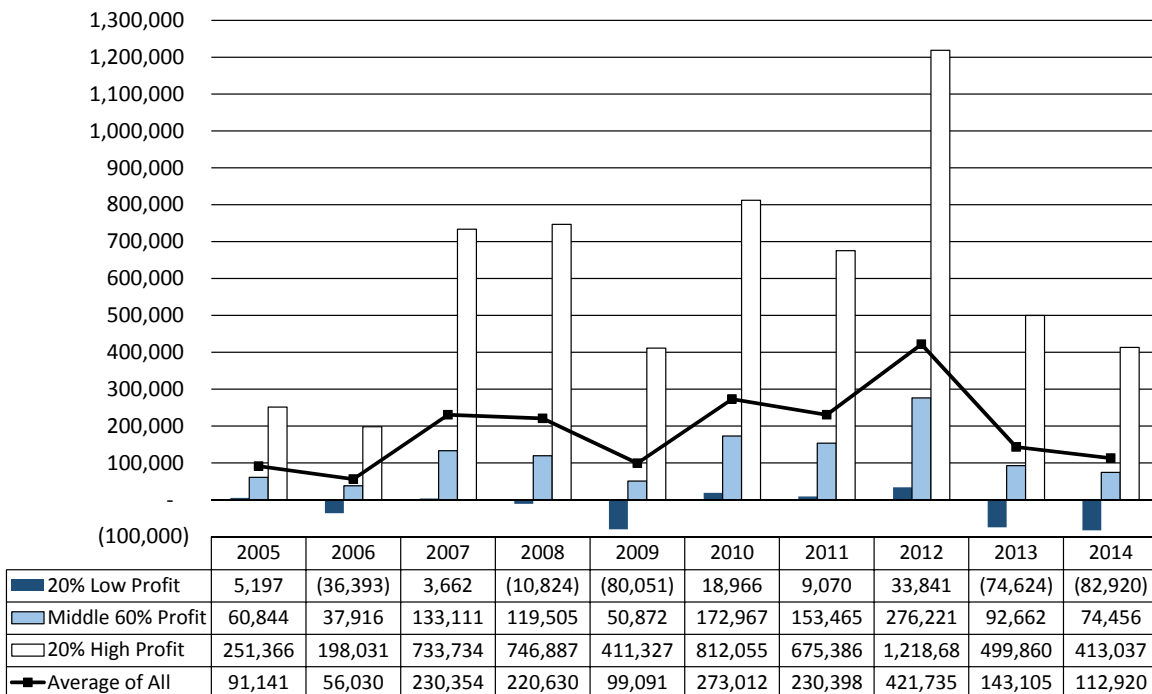
# Figure 1. Gross Cash Income Per Farm

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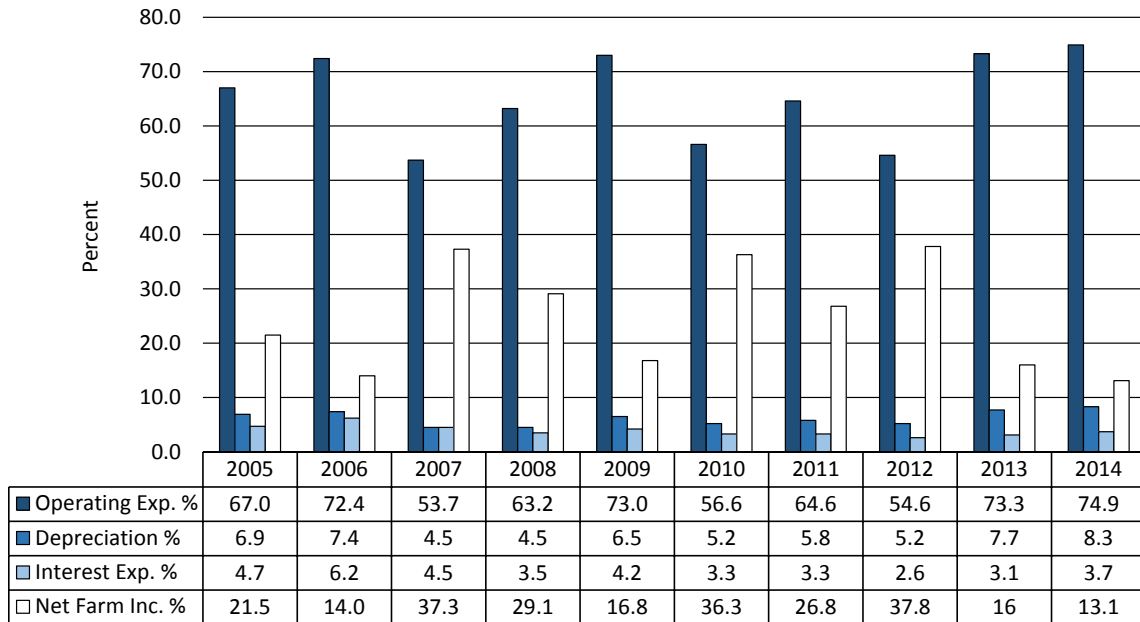
# Figure 2. Net Farm Income (Accrual) Per Farm

N.D. Farm Business Management Education Program – South Central Region



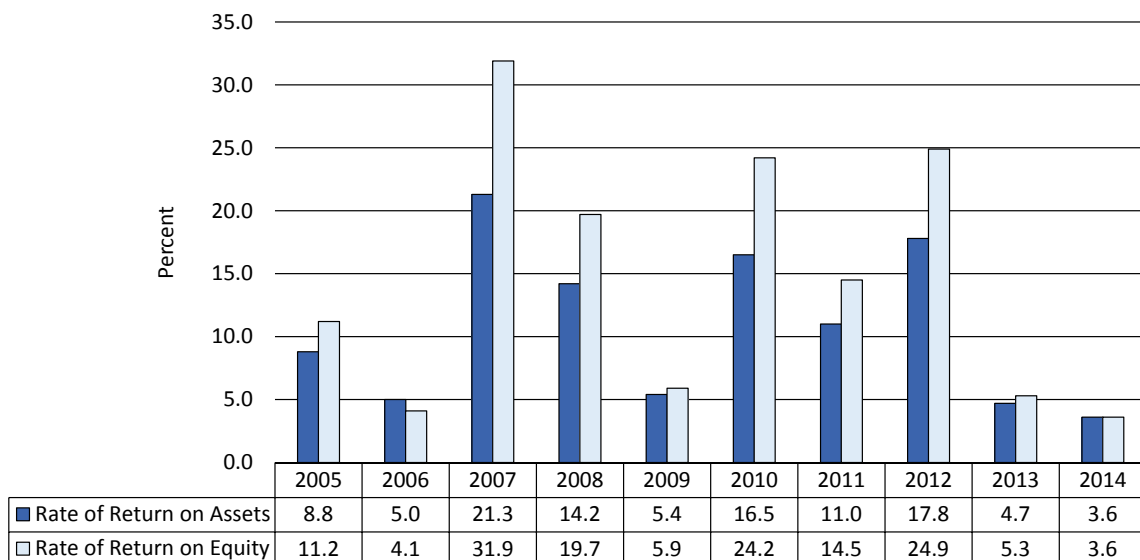
## Figure 3. Financial Efficiency Measures (As Percent of Gross Revenue)

N.D. Farm Business Management Education Program – South Central Region



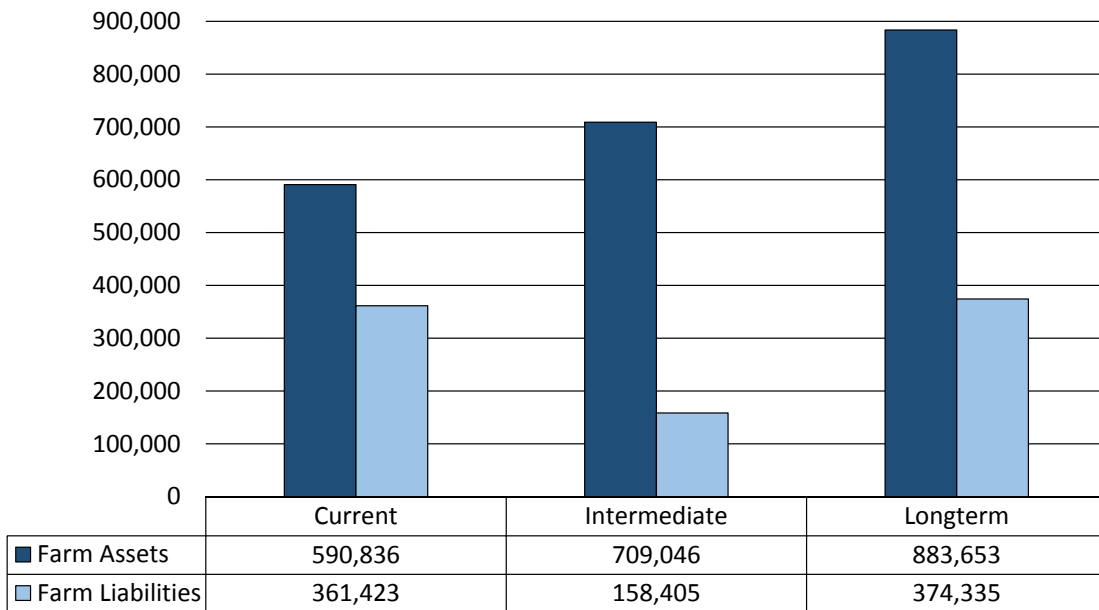
## Figure 4. Profitability Measures Per Farm

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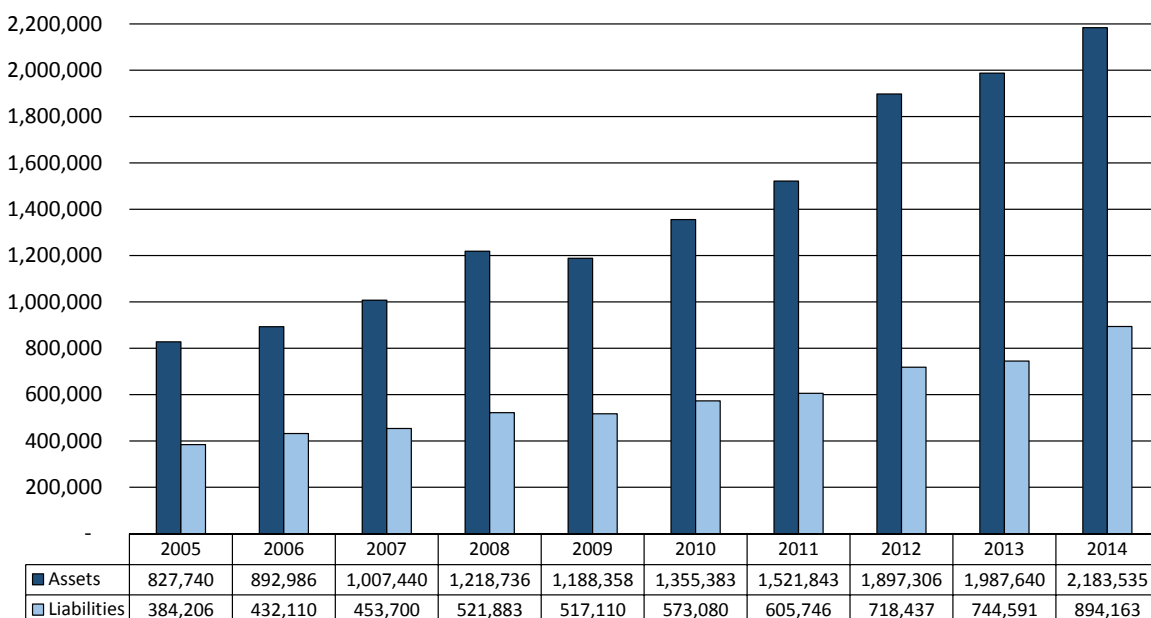
## Figure 5. Assets and Liabilities Per Farm, 2014

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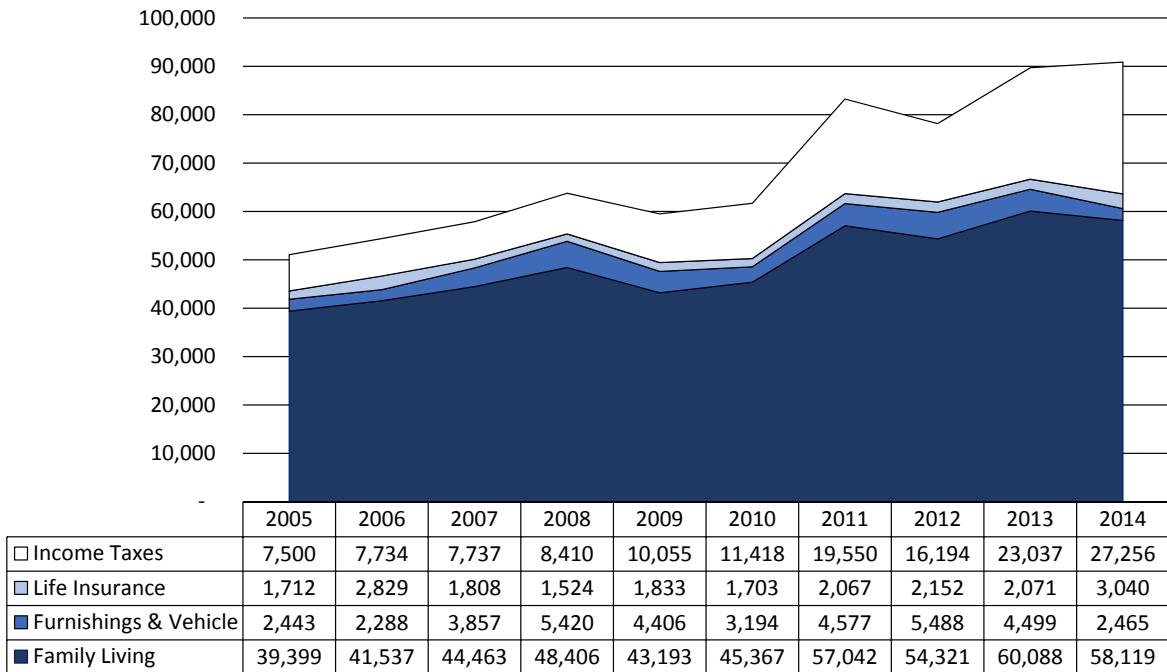
## Figure 6. Total Farm Assets and Liabilities

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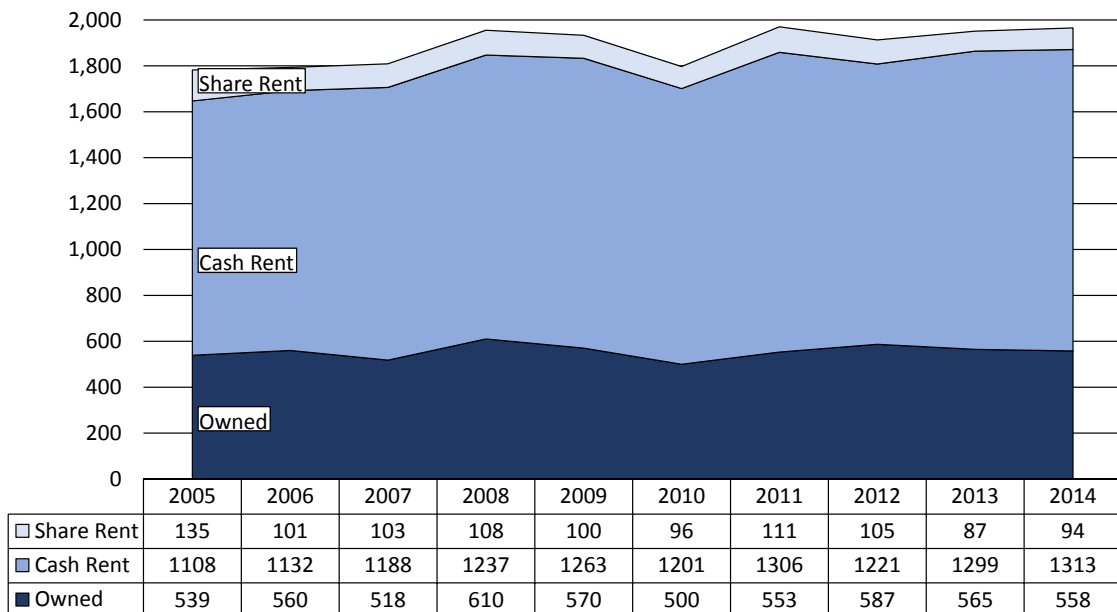
## Figure 7. Household and Personal Expenses

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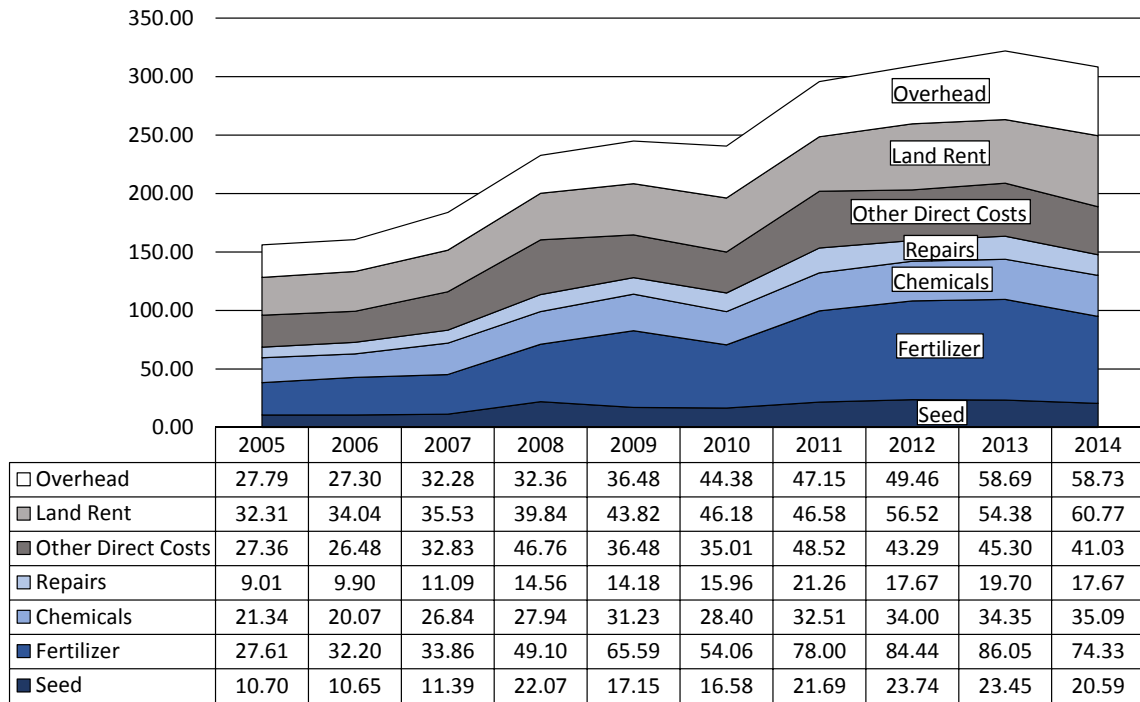
## Figure 8. Crop Acreage Per Farm

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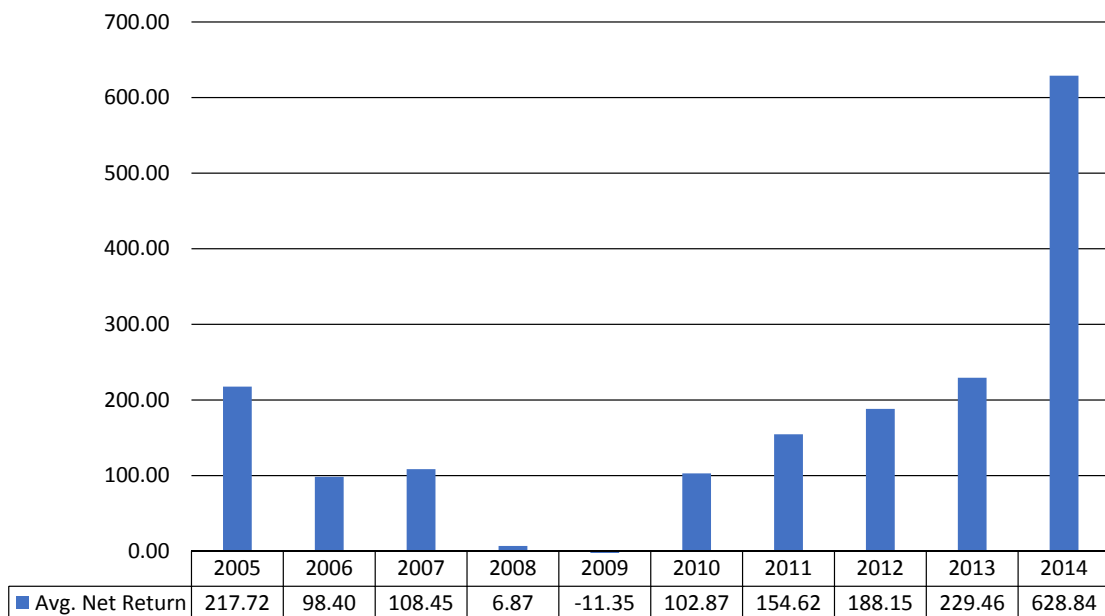
## Figure 9. Spring Wheat Costs Per Acre

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## Figure 10. Average Net Return Per Beef Cow

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<sup>1</sup>Based on towing and payload, when properly equipped. Class is Full-Size Pickup. <sup>2</sup>Based on 2013 CY Sales.