

# **2016 ANNUAL REPORT**

## **State Averages**

**North Dakota Farm and Ranch Business  
Management Education**





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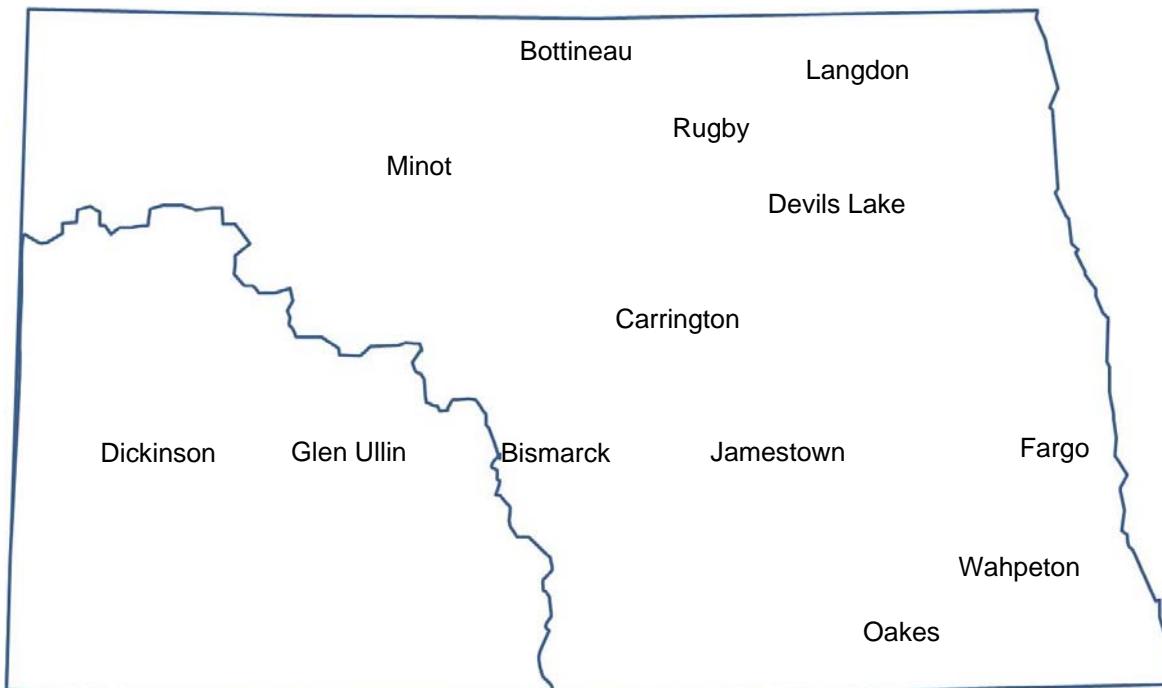
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# NORTH DAKOTA FARM BUSINESS MANAGEMENT EDUCATION

## 2016 ANNUAL REPORT

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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 2016 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.



**2016 State Report**  
**North Dakota Farm Business Management Education**

**TABLE OF CONTENTS**

Introduction .....	1
Explanatory Notes for the Farm Operators' Reports .....	2
Farm Income Statement .....	7
Inventory Changes .....	9
Depreciation .....	10
Profitability Measures .....	11
Liquidity and Repayment Capacity Measures.....	12
Balance Sheet at Cost Values .....	13
Statement of Cash Flows .....	14
Financial Standards Measures .....	15
Crop Production and Marketing Summary .....	16
Household and Personal Expenses .....	17
Operator and Labor Information .....	18
Nonfarm Summary.....	19
Financial Summary (sorted by gross farm income) .....	20
Financial Summary (sorted by age of operator).....	21
Financial Summary (sorted by farm type) .....	22
Explanatory Notes for Crop Tables .....	23
Barley on Owned Land .....	24
Barley on Cash Rent.....	25
Beans, Pinto on Owned Land .....	26
Beans, Pinto on Cash Rent.....	27
Canola on Owned Land .....	28
Canola on Cash Rent .....	29
Canola on Share Rent .....	30
Corn on Owned Land.....	31
Corn on Cash Rent .....	32
Corn on Share Rent.....	33
Corn Silage on Owned Land .....	34
Corn Silage on Cash Rent .....	35
CRP on Owned Land .....	36
Fallow on Owned Rent .....	37
Flax on Owned Land.....	38
Flax on Cash Rent .....	39
Hay, Alfalfa on Owned Land .....	40
Hay, Alfalfa on Cash Rent.....	41
Hay, Grass on Owned Land.....	42
Hay, Grass on Cash Rent .....	43
Hay, Mixed Alfalfa/Grass on Owned Land .....	44
Hay, Mixed Alfalfa/Grass on Cash Rent .....	45
Hay, Small Grain on Owned Land .....	46
Hay, Small Grain on Cash Rent.....	47
Oats on Owned Land.....	48
Oats on Cash Rent .....	49

Pasture on Owned Land .....	50
Pasture on Cash Rent .....	51
Peas, Field on Owned Land.....	52
Peas, Field on Cash Rent .....	53
Soybeans on Owned Land .....	54
Soybeans on Cash Rent .....	55
Soybeans on Share Rent .....	56
Soybeans, Food on Cash Rent.....	57
Sugar Beets on Owned Land.....	58
Sugar Beets on Cash Rent .....	59
Sunflowers on Owned Land.....	60
Sunflowers on Cash Rent .....	61
Wheat, Durum on Owned Land .....	62
Wheat, Durum on Cash Rent.....	63
Wheat, Spring on Owned Land .....	64
Wheat, Spring on Cash Rent .....	65
Wheat, Spring on Share Rent .....	66
Wheat, Winter on Cash Rent .....	67
Explanatory Notes for Livestock Tables .....	68
Beef Cow-Calf – Average Per Cwt. Produced .....	69
Beef Cow-Calf – Average Per Cow .....	70
Beef Cow-Calf Whole Herd w/backgrounding – Average Per Cwt. Produced .....	71
Beef Cow-Calf Whole Herd w/backgrounding – Average Per Cow .....	72
Beef Cow-Calf (shares) – Average Per Cwt. Produced .....	73
Beef Cow-Calf (shares) – Average Per Cow .....	74
Beef Replacement Heifers – Average Per Head .....	75
Beef Replacement Heifers – Average Per Head Sold/Trans .....	76
Beef, Background Beef – Average Per Cwt Produced .....	77
Beef, Background Beef – Average Per Head .....	78
Figure 1. Gross Cash Income per Farm .....	79
Figure 2. Net Farm Income (Accrual) per Farm .....	79
Figure 3. Financial Efficiency Measures .....	80
Figure 4. Profitability Measures per Farm .....	80
Figure 5. Assets and Liabilities per Farm, 2016 .....	81
Figure 6. Total Farm Assets and Liabilities .....	81
Figure 7. Household and Personal Expenses .....	82
Figure 8. Crop Acreage per Farm .....	82
Figure 9. Spring Wheat Costs per Acre .....	83
Figure 10. Average Net Return per Beef Cow .....	83

## 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 2016 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 28th 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 operators 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 repossession.

### **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 operators 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**  
**State Report, 2016**  
**(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	531	106	106	107
<b>Cash Farm Income</b>				
Barley	30,927	20,185	19,252	79,272
Beans, Black Turtle	472	472	-	1,302
Beans, Garbonzo	560	673	-	2,110
Beans, Navy	520	-	130	2,133
Beans, Pinto	12,354	2,520	3,551	44,285
Buckwheat	201	789	219	-
Canola	26,630	17,539	19,571	47,645
Corn	111,426	55,725	85,083	224,504
Corn Silage	154	-	-	117
Flax	3,101	2,556	2,981	4,631
Hay, Alfalfa	1,379	98	306	-
Hay, Grass	285	116	1	1,212
Hay, Mixed	125	73	24	370
Hay, Mixed Alfalfa/Grass	255	321	120	43
Hay, Small Grain	162	341	-	160
Lentils	1,826	-	-	7,786
Mustard Seed	50	207	-	-
Oats	199	201	84	514
Peas, Field	6,835	3,243	3,209	13,395
Potatoes	423	-	-	2,098
Rye	219	13	152	29
Safflower	160	157	-	639
Soybeans	175,956	80,125	140,419	394,076
Straw	1,848	156	136	116
Sugar Beets	17,443	25,043	14,881	2,551
Sunflowers	13,726	11,290	8,133	21,065
Sunflowers, Confectionary	1,202	1,089	-	3,952
Wheat, Durum	6,618	6,778	3,296	13,972
Wheat, Spring	82,367	54,924	63,454	171,445
Wheat, Winter	956	709	95	2,873
Rented Out	1,397	292	1,627	4,152
Soybeans, Organic	404	-	392	1,617
Soybeans, Food	3,316	608	4,536	6,414
Corn, Organic	144	-	721	-
Wheat, Spring, Organic	61	-	308	-
Flax, Organic	89	445	-	-
Miscellaneous crop income	1,940	6,530	110	-
Beef Bulls	2,659	1,521	6,606	3,785
Beef Cow-Calf, Beef Calves	22,514	32,987	21,654	16,608
Beef Replacement Heifers	3,788	5,618	2,587	6,807
Beef Backgrounding	19,287	27,669	10,823	14,808
Beef Finishing	10,334	8,691	519	24,737
Beef Finish Yearlings	768	-	257	43
Beef Stockers	572	567	-	1,778
Dairy, Milk	15,300	37,701	5,426	2,744
Dairy, Dairy Calves	744	3,227	-	-
Dairy Replacement Heifers	55	275	-	-
Hogs, Farrow To Finish, Raised Hog	959	-	-	4,759
Honey Production, Honey	432	-	2,163	-
Beef Finish Cull Cows	224	337	784	-
Bison Finishing	170	-	-	-
Dairy Backgrounding	275	700	442	232
Cull breeding livestock	6,329	9,774	5,766	4,975
Misc. livestock income	2,346	2,716	648	5,238
LDP payments	116	11	-	53
Crop government payments	35,672	17,693	26,065	76,058
CRP payments	1,290	513	396	2,987
Other government payments	8,302	7,078	7,460	15,537
Custom work income	13,816	11,070	12,321	35,191
Patronage dividends, cash	7,693	5,349	6,580	13,437
Crop insurance income	26,571	20,665	12,581	44,692
Property insurance income	3,100	3,978	1,801	7,664
Sale of resale items	718	1,884	1,380	299
Other farm income	14,805	9,789	15,481	20,638
Gross Cash Farm Income	704,566	503,031	514,530	1,357,549

**Farm Income Statement (continued)**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Farm Income)**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	531	106	106	107
<b>Cash Farm Expense</b>				
Seed	84,301	49,693	66,167	164,247
Fertilizer	81,108	56,710	56,403	160,609
Crop chemicals	55,325	38,365	39,812	108,485
Crop insurance	27,213	17,666	19,334	51,534
Drying expense	1,564	782	801	3,356
Storage	581	177	94	1,738
Irrigation energy	200	102	316	360
Crop marketing	407	662	321	625
Crop miscellaneous	1,940	1,664	2,803	3,192
Consultants	1,239	685	960	3,923
Feeder livestock purchase	13,249	15,105	1,540	17,377
Purchased feed	17,031	31,226	7,703	19,721
Breeding fees	482	285	1,346	99
Veterinary	3,061	5,089	2,486	2,371
Supplies	2,293	2,313	2,194	1,646
Livestock custom hire	48	-	3	236
Livestock leases	149	83	299	-
Grazing fees	59	279	-	-
Hauling and trucking	272	-	-	-
Livestock marketing	1,257	2,351	1,352	1,285
Interest	33,349	32,505	26,358	54,192
Fuel & oil	22,797	18,451	17,174	37,389
Repairs	48,250	47,520	36,306	81,111
Custom hire	15,370	15,478	10,807	20,227
Hired labor	24,659	22,327	12,849	49,698
Land rent	94,990	64,353	67,274	185,878
Stock/quota lease	765	599	819	-
Machinery leases	8,810	11,634	6,372	13,386
Building leases	1,192	689	916	2,850
Real estate taxes	5,131	4,346	4,464	8,087
Farm insurance	10,198	8,894	7,978	17,477
Utilities	7,924	7,865	6,093	12,681
Dues & professional fees	3,702	3,357	2,680	6,721
Purchase of resale items	3,733	3,639	3,645	4,337
Miscellaneous	8,274	7,786	5,859	14,802
Total cash expense	580,923	472,680	413,524	1,049,637
Net cash farm income	123,643	30,351	101,006	307,912
<b>Inventory Changes</b>				
Prepays and supplies	-2,669	-4,772	-2,275	-8,393
Accounts receivable	2,188	29	4,549	-9,225
Hedging accounts	579	-465	-708	5,156
Other current assets	-176	-2,639	209	-312
Crops and feed	71,924	-14,081	30,747	247,300
Market livestock	-5,772	-9,545	-4,392	-7,158
Breeding livestock	383	-2,895	-847	3,671
Other assets	5	-949	521	-3,983
Accounts payable	2,362	9,263	3,627	4,386
Accrued interest	-281	-2,199	-608	2,454
Total inventory change	68,543	-28,252	30,822	233,897
Net operating profit	192,186	2,098	131,827	541,808
<b>Depreciation</b>				
Machinery and equipment	-55,074	-35,910	-40,594	-112,583
Titled vehicles	-5,208	-5,085	-4,342	-7,626
Buildings and improvements	-4,982	-3,301	-2,090	-13,385
Total depreciation	-65,264	-44,295	-47,027	-133,595
Net farm income from operations	126,922	-42,197	84,801	408,214
Gain or loss on capital sales	-170	833	-125	-1,593
Net farm income	126,752	-41,364	84,675	406,621

**Inventory Changes**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(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	531	106	106	107
Net cash farm income	123,643	30,351	101,006	307,912
<b>Crops and Feed</b>				
Ending inventory	456,450	217,082	251,517	1,127,084
Beginning inventory	384,526	231,164	220,770	879,784
Inventory change	71,924	-14,081	30,747	247,300
<b>Market Livestock</b>				
Ending inventory	45,653	56,670	41,386	47,662
Beginning inventory	51,426	66,216	45,778	54,820
Inventory change	-5,772	-9,545	-4,392	-7,158
<b>Accts Receivable</b>				
Ending inventory	40,217	39,156	34,722	54,623
Beginning inventory	38,029	39,127	30,173	63,848
Inventory change	2,188	29	4,549	-9,225
<b>Prepaid Expenses and Supplies</b>				
Ending inventory	50,274	17,756	25,912	132,403
Beginning inventory	52,944	22,528	28,187	140,795
Inventory change	-2,669	-4,772	-2,275	-8,393
<b>Hedging Activities</b>				
Ending inventory	3,714	2,338	1,806	10,300
Withdrawals	4,003	2,680	1,801	11,564
Beginning inventory	4,205	2,599	2,627	10,463
Deposits	2,934	2,883	1,688	6,244
Gain or loss	579	-465	-708	5,156
<b>Other Current Assets</b>				
Ending inventory	1,899	598	855	1,165
Beginning inventory	2,075	3,237	647	1,477
Inventory change	-176	-2,639	209	-312
<b>Breeding Livestock</b>				
Ending inventory	86,494	127,408	77,429	77,915
Capital sales	3,798	5,805	1,380	1,727
Beginning inventory	80,594	123,540	70,100	67,963
Capital purchases	9,316	12,569	9,556	8,008
Depreciation, capital adjust	383	-2,895	-847	3,671
<b>Other Capital Assets</b>				
Ending inventory	91,790	77,059	76,941	134,390
Capital sales	2,364	1,040	219	9,845
Beginning inventory	87,085	72,561	64,524	137,965
Capital purchases	7,064	6,486	12,115	10,254
Depreciation, capital adjust	5	-949	521	-3,983
<b>Accounts Payable</b>				
Beginning inventory	21,544	29,021	20,765	30,481
Ending inventory	19,182	19,758	17,138	26,095
Inventory change	2,362	9,263	3,627	4,386
<b>Accrued Interest</b>				
Beginning inventory	14,921	14,936	11,596	24,782
Ending inventory	15,202	17,135	12,204	22,327
Inventory change	-281	-2,199	-608	2,454
Total inventory change	68,543	-28,252	30,822	233,897
Net operating profit	192,186	2,098	131,827	541,808

***Depreciation***  
***North Dakota Farm Business Management Education Program***  
***State Report, 2016***  
***(Farms Sorted By Net Farm Income)***

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	531	106	106	107
Net operating profit	192,186	2,098	131,827	541,808
<b>Machinery and Equipment</b>				
Ending inventory	593,409	395,194	436,504	1,206,842
Capital sales	9,604	3,986	9,343	17,543
Beginning inventory	610,148	411,730	450,626	1,223,074
Capital purchases	47,939	23,361	35,814	113,894
Depreciation, capital adjust.	-55,074	-35,910	-40,594	-112,583
<b>Titled Vehicles</b>				
Ending inventory	45,561	46,205	37,495	64,508
Capital sales	927	1,760	1,283	1,044
Beginning inventory	46,489	49,709	38,097	64,077
Capital purchases	5,207	3,341	5,023	9,101
Depreciation, capital adjust.	-5,208	-5,085	-4,342	-7,626
<b>Buildings and Improvements</b>				
Ending inventory	173,042	124,935	97,789	408,824
Capital sales	185	311	-	-
Beginning inventory	168,478	123,337	98,192	392,053
Capital purchases	9,730	5,211	1,687	30,157
Depreciation, capital adjust.	-4,982	-3,301	-2,090	-13,385
Total depreciation, capital adj.	-65,264	-44,295	-47,027	-133,595
Net farm income from operations	126,922	-42,197	84,801	408,214
Gain or loss on capital sales	-170	833	-125	-1,593
Net farm income	126,752	-41,364	84,675	406,621

***Profitability Measures***  
***North Dakota Farm Business Management Education Program***  
***State Report, 2016***  
***(Farms Sorted By Net Farm Income)***

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	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	531	106	106	107
<b>Profitability (assets valued at cost)</b>				
Net farm income from operations	126,922	-42,197	84,801	408,214
Rate of return on assets	5.0 %	-3.0 %	4.5 %	8.7 %
Rate of return on equity	5.8 %	-11.4 %	4.8 %	11.3 %
Operating profit margin	14.4 %	-11.4 %	12.7 %	23.5 %
Asset turnover rate	34.9 %	26.7 %	35.2 %	37.3 %
Farm interest expense	33,630	34,704	26,965	51,738
Value of operator lbr and mgmt.	54,222	40,683	44,382	95,812
Return on farm assets	106,329	-48,176	67,384	364,139
Average farm assets	2,121,274	1,579,846	1,510,317	4,162,055
Return on farm equity	72,700	-82,880	40,418	312,401
Average farm equity	1,257,732	726,122	836,227	2,762,009
Value of farm production	739,695	422,398	531,408	1,552,057

**Liquidity & Repayment Capacity Measures**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Farm Income)**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	531	106	106	107
<b>Liquidity</b>				
Current ratio	1.69	1.12	1.55	2.09
Working capital	221,250	35,733	135,743	608,151
Working capital to gross inc	32.9 %	8.8 %	25.1 %	43.7 %
Current assets	542,944	327,510	382,876	1,168,115
Current liabilities	321,694	291,777	247,133	559,964
Gross revenues (accrual)	672,246	404,021	541,867	1,392,529
<b>Repayment capacity</b>				
Net farm income from operations	126,922	-42,197	84,801	408,214
Depreciation	65,264	44,295	47,027	133,595
Personal income	36,008	51,268	32,842	32,777
Family living/owner withdrawals	-64,337	-57,995	-59,959	-95,289
Cash discrepancy	-188	-88	-61	-397
Payments on personal debt	-3,976	-5,003	-4,414	-4,627
Income taxes paid	-14,017	-9,436	-11,795	-27,563
Interest on term debt	20,529	22,824	19,060	29,778
Capital debt repayment capacity	166,394	3,755	107,564	476,883
Scheduled term debt payments	-98,838	-87,067	-73,519	-186,687
Capital debt repayment margin	67,556	-83,312	34,044	290,196
Cash replacement allowance	-32,005	-16,437	-19,649	-74,431
Replacement margin	35,550	-99,749	14,395	215,765
Term debt coverage ratio	1.68	0.04	1.46	2.55
Replacement coverage ratio	1.27	0.04	1.15	1.83

**Balance Sheet at Cost Values**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(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	488	98	103	87
<b>Assets</b>				
Current Farm Assets				
Cash and checking balance	44,889	30,250	30,159	101,491
Prepaid expenses & supplies	40,419	14,201	26,114	105,371
Growing crops	647	494	628	-
Accounts receivable	33,430	36,563	34,361	47,357
Hedging accounts	2,903	699	1,858	8,827
Crops held for sale or feed	374,890	186,519	251,495	854,573
Market livestock held for sale	45,197	58,631	38,009	50,140
Other current assets	570	153	252	356
Total current farm assets	542,944	327,510	382,876	1,168,115
Intermediate Farm Assets				
Breeding livestock	78,126	119,400	70,108	69,874
Machinery and equipment	524,291	358,756	434,567	1,037,844
Titled vehicles	41,849	44,385	36,173	56,929
Other intermediate assets	43,256	37,567	51,502	44,703
Total intermediate farm assets	687,522	560,108	592,349	1,209,350
Long Term Farm Assets				
Farm land	521,561	395,240	428,954	1,011,452
Buildings and improvements	141,269	98,072	98,513	327,382
Other long-term assets	35,181	27,680	27,681	52,584
Total long-term farm assets	698,011	520,992	555,147	1,391,418
Total Farm Assets	1,928,477	1,408,610	1,530,372	3,768,882
Total Nonfarm Assets	275,441	192,922	224,793	467,745
Total Assets	2,203,918	1,601,532	1,755,166	4,236,627
<b>Liabilities</b>				
Current Farm Liabilities				
Accrued interest	14,167	15,660	12,340	21,242
Accounts payable	16,055	16,190	17,637	18,959
Current notes	228,458	209,839	169,186	397,770
Principal due on term debt	63,014	50,088	47,970	121,992
Total current farm liabilities	321,694	291,777	247,133	559,964
Total intermediate farm liabs	166,791	177,217	146,582	246,808
Total long term farm liabilities	322,308	318,435	285,782	549,690
Total farm liabilities	810,793	787,429	679,497	1,356,462
Total nonfarm liabilities	54,752	54,765	66,755	68,700
Total liabilities	865,545	842,193	746,252	1,425,162
Net worth (farm and nonfarm)	1,338,372	759,339	1,008,914	2,811,465
Net worth change	78,899	-38,932	50,964	278,017
Percent net worth change	6 %	-5 %	5 %	11 %
<b>Ratio Analysis</b>				
Current farm liabilities / assets	59 %	89 %	65 %	48 %
Intermediate farm liab. / assets	24 %	32 %	25 %	20 %
Long term farm liab. / assets	46 %	61 %	51 %	40 %
Total debt to asset ratio	39 %	53 %	43 %	34 %

**Statement Of Cash Flows**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Farm Income)**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	531	106	106	107
Beginning cash (farm & nonfarm)	48,804	32,099	37,111	81,873
<b>Cash Provided By Operating Activities</b>				
Gross cash farm income	704,566	503,031	514,530	1,357,549
Total cash farm expense	-580,923	-472,680	-413,524	-1,049,637
Net cash from hedging transactions	1,070	-203	113	5,319
Cash provided by operating	124,713	30,147	101,119	313,231
<b>Cash Provided By Investing Activities</b>				
Sale of breeding livestock	3,816	5,891	1,380	1,727
Sale of machinery & equipment	9,505	3,843	9,352	17,122
Sale of titled vehicles	878	1,660	1,148	1,068
Sale of farm land	10,939	15,934	896	37,470
Sale of farm buildings	188	311	-	-
Sale of other farm assets	1,690	980	219	6,559
Sale of nonfarm assets	6,997	5,964	7,062	14,490
Purchase of breeding livestock	-9,316	-12,569	-9,556	-8,008
Purchase of machinery & equip.	-47,939	-23,361	-35,814	-113,894
Purchase of titled vehicles	-5,207	-3,341	-5,023	-9,101
Purchase of farm land	-30,274	-18,352	-18,016	-64,184
Purchase of farm buildings	-9,730	-5,211	-1,687	-30,157
Purchase of other farm assets	-7,064	-6,486	-12,115	-10,254
Purchase of nonfarm assets	-16,606	-15,304	-15,465	-23,711
Cash provided by investing	-92,125	-50,039	-77,619	-180,874
<b>Cash Provided By Financing Activities</b>				
Money borrowed	612,159	573,625	414,357	1,160,719
Principal payments	-600,233	-548,421	-400,942	-1,176,096
Personal income	36,008	51,268	32,842	32,777
Family living/owner withdrawals	-64,335	-57,995	-59,954	-95,289
Income and social security tax	-13,608	-9,111	-12,004	-26,176
Capital contributions	1,759	7,978	-	353
Capital distributions	-870	-122	-717	-1,241
Dividends paid	-2	-	-5	-
Cash gifts and inheritances	6,665	10,178	673	9,607
Gifts given	-2,083	-35	-356	-9,828
Other cash flows	7	-	-	-
Cash provided by financing	-24,533	27,364	-26,105	-105,176
Net change in cash balance	8,055	7,473	-2,605	27,181
Ending cash (farm & nonfarm)	56,671	39,483	34,445	108,656
Discrepancy	188	88	61	397

**Financial Standards Measures**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Farm Income)**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	531	106	106	107
<b>Liquidity</b>				
Current ratio	1.69	1.12	1.55	2.09
Working capital	221,250	35,733	135,743	608,151
Working capital to gross inc	32.9 %	8.8 %	25.1 %	43.7 %
<b>Solvency (cost)</b>				
Farm debt to asset ratio	42 %	56 %	44 %	36 %
Farm equity to asset ratio	58 %	44 %	56 %	64 %
Farm debt to equity ratio	0.73	1.27	0.80	0.56
<b>Profitability (cost)</b>				
Rate of return on farm assets	5.0 %	-3.0 %	4.5 %	8.7 %
Rate of return on farm equity	5.8 %	-11.4 %	4.8 %	11.3 %
Operating profit margin	14.4 %	-11.4 %	12.7 %	23.5 %
Net farm income	126,752	-41,364	84,675	406,621
EBITDA	225,816	36,802	158,793	593,546
<b>Repayment Capacity</b>				
Capital debt repayment capacity	166,394	3,755	107,564	476,883
Capital debt repayment margin	67,556	-83,312	34,044	290,196
Replacement margin	35,550	-99,749	14,395	215,765
Term debt coverage ratio	1.68	0.04	1.46	2.55
Replacement coverage ratio	1.27	0.04	1.15	1.83
<b>Efficiency</b>				
Asset turnover rate (cost)	34.9 %	26.7 %	35.2 %	37.3 %
Operating expense ratio	70.8 %	92.2 %	70.8 %	62.8 %
Depreciation expense ratio	8.4 %	9.4 %	8.6 %	8.4 %
Interest expense ratio	4.3 %	7.3 %	5.0 %	3.2 %
Net farm income ratio	16.4 %	-8.8 %	15.6 %	25.5 %

**Crop Production and Marketing Summary**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Farm Income)**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	531	106	106	107
<b>Acreage Summary</b>				
Total acres owned	751	726	580	1,279
Total crop acres	1,878	1,309	1,296	3,709
Crop acres owned	473	374	358	845
Crop acres cash rented	1,303	859	858	2,650
Crop acres share rented	103	77	80	213
Total pasture acres	487	815	402	485
Percent crop acres owned	25 %	29 %	28 %	23 %
Mach invest/crop acre cost	344	342	370	345
<b>Average Price Received (Cash Sales Only)</b>				
Soybeans per bushel	8.75	8.70	8.68	8.75
Wheat, Spring per bushel	4.53	4.43	4.49	4.57
Corn per bushel	3.21	3.28	3.19	3.24
Canola per cwt	15.61	14.91	15.30	16.08
Barley per bushel	4.67	4.06	4.55	4.88
Sunflowers per cwt	19.14	18.20	19.35	19.33
Peas, Field per bushel	7.30	7.16	8.28	7.02
Beans, Pinto per cwt	25.15	23.26	22.93	25.46
Flax per bushel	8.13	7.65	7.29	8.60
Wheat, Durum per bushel	6.08	5.52	6.08	6.51
Wheat, Winter per bushel	3.17	-	-	3.22
Hay, Grass per ton	51.21	-	-	57.96
Hay, Mixed Alfalfa/Grass per ton	77.79	-	-	-
Hay, Alfalfa per ton	86.19	-	-	-
Oats per bushel	2.54	-	-	-
Soybeans, Food per bushel	12.44	-	-	-
Sunflowers, Confectionary per cwt	26.33	-	-	-
<b>Average Yield Per Acre</b>				
Soybeans (bushel)	43.00	40.77	42.48	43.09
Wheat, Spring (bushel)	53.24	44.12	51.90	57.40
Corn (bushel)	163.59	163.40	162.65	166.73
Pasture (aum)	0.820	0.696	0.909	1.02
Canola (cwt)	19.01	16.70	18.21	19.93
Barley (bushel)	73.97	77.20	59.27	78.74
Sunflowers (cwt)	19.81	16.40	17.14	21.21
Hay, Grass (ton)	1.19	0.964	1.45	1.45
Hay, Mixed Alfalfa/Grass (ton)	1.23	1.03	1.48	1.24
Peas, Field (bushel)	38.15	-	38.53	40.47
Hay, Alfalfa (ton)	2.44	1.70	1.69	2.75
Hay, Small Grain (ton)	1.88	1.47	2.34	2.03
Wheat, Durum (bushel)	49.47	41.08	42.25	50.27
Beans, Pinto (cwt)	16.76	9.95	-	17.55
Corn Silage (ton)	16.70	15.64	17.54	15.85
Flax (bushel)	21.10	13.92	22.48	26.91
Sugar Beets (ton)	26.17	20.00	28.32	-
Soybeans, Food (bushel)	37.80	-	38.49	37.87
Hay, Mixed (ton)	1.24	1.11	1.09	-
Oats (bushel)	92.18	-	-	100.04
Wheat, Winter (bushel)	55.12	-	-	-
Lentils (cwt)	14.72	-	-	17.35
Hay, Summer Annual Grass (ton)	2.16	-	-	-

***Household and Personal Expenses***  
***North Dakota Farm Business Management Education Program***  
***State Report, 2016***  
***(Farms Sorted By Net Farm Income)***

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	164	35	37	33
Average family size	2.9	2.9	3.1	3.0
Family Living Expenses				
Food and meals expense	8,310	9,211	8,430	8,052
Medical care	4,812	3,948	5,205	7,051
Health insurance	8,319	6,333	6,844	11,274
Cash donations	2,473	1,301	3,032	3,176
Household supplies	6,560	6,419	4,697	8,796
Clothing	2,066	1,957	1,439	3,404
Personal care	5,373	2,668	5,860	9,202
Child / Dependent care	571	273	314	882
Alimony and child support	9	20	-	-
Gifts	1,724	1,334	1,082	2,461
Education	1,333	1,063	1,678	2,150
Recreation	3,856	2,560	3,567	5,116
Utilities (household share)	3,493	3,110	3,459	4,675
Personal vehicle operating exp	2,795	3,853	3,119	2,595
Household real estate taxes	343	181	319	324
Dwelling rent	246	329	22	164
Household repairs	1,926	2,249	1,536	1,987
Personal interest	1,678	1,235	1,709	2,829
Disability / Long term care ins	395	159	243	349
Life insurance payments	2,834	2,408	1,740	6,437
Personal property insurance	414	794	507	278
Miscellaneous	4,160	3,439	4,167	5,383
Total cash family living expense	63,691	54,846	58,968	86,584
Family living from the farm	173	165	435	-
Total family living	63,864	55,012	59,403	86,584
Other Nonfarm Expenditures				
Income taxes	14,097	7,644	10,278	29,782
Furnishing & appliance purchases	76	26	-	76
Nonfarm vehicle purchases	3,328	3,338	5,347	4,291
Nonfarm real estate purchases	5,039	8,713	2,693	892
Other nonfarm capital purchases	753	859	500	372
Nonfarm savings & investments	2,832	6,035	-31	5,707
Total other nonfarm expenditures	26,126	26,616	18,786	41,119
Total cash family living investment & nonfarm capital purch	89,817	81,463	77,754	127,703

***Operator and Labor Information***  
***North Dakota Farm Business Management Education Program***  
***State Report, 2016***  
***(Farms Sorted By Net Farm Income)***

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	531	106	106	107
<b>Operator Information</b>				
Average number of operators	1.1	1.1	1.0	1.2
Average age of operators	45.5	46.1	43.9	47.8
Average number of years farming	21.3	20.6	19.1	24.2
<b>Results Per Operator</b>				
Working capital	260,829	37,985	132,743	689,017
Total assets (cost)	2,255,948	1,637,747	1,705,904	4,067,296
Total liabilities	852,826	853,217	725,371	1,242,247
Net worth (cost)	1,403,122	784,530	980,532	2,825,049
Gross farm income	713,882	439,219	529,315	1,353,203
Total farm expense	596,774	478,455	446,848	1,006,545
Net farm income from operations	117,108	-39,236	82,467	346,658
Net nonfarm income	33,224	47,670	31,939	27,834
Family living & tax withdrawals	72,468	62,781	69,838	104,664
Total acres owned	693.1	675.1	563.7	1,086.4
Total crop acres	1,732.6	1,217.2	1,260.7	3,149.5
Crop acres owned	436.1	347.4	348.6	717.8
Crop acres cash rented	1,201.8	798.5	834.7	2,250.7
Crop acres share rented	94.7	71.3	77.4	180.9
Total pasture acres	449.1	758.1	391.3	412.2
<b>Labor Analysis</b>				
Number of farms	531	106	106	107
Total unpaid labor hours	1,999	1,879	1,898	2,637
Total hired labor hours	1,062	951	491	2,169
Total labor hours per farm	3,062	2,830	2,389	4,807
Unpaid hours per operator	1,845	1,747	1,846	2,240

**Nonfarm Summary**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Farm Income)**

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	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	531	106	106	107
<b>Nonfarm Income</b>				
Personal wages & salary	22,011	31,292	24,848	13,356
Net nonfarm business income	4,312	7,486	1,658	5,569
Personal rental income	1,554	1,071	925	1,922
Personal interest income	343	14	34	1,258
Personal cash dividends	341	162	2	968
Tax refunds	1,143	1,865	1,170	594
Nontaxable personal inc.	7	-	-	-
Other nonfarm income	6,303	9,377	4,206	9,110
Total nonfarm income	36,015	51,268	32,842	32,777
Gifts and inheritances	6,665	10,178	673	9,607

**Financial Summary**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Gross Farm Income)**

	<b>Avg. Of All Farms</b>	<b>Less than 100,000</b>	<b>100,001 - 250,000</b>	<b>250,001 - 500,000</b>	<b>500,001 - 1,000,000</b>	<b>1,000,001- 2,000,000</b>	<b>Over 2,000,000</b>
Number of farms	531	65	67	120	171	80	28
<b>Income Statement</b>							
Gross cash farm income	704,566	53,237	175,414	370,279	711,456	1,375,334	2,956,874
Total cash farm expense	580,923	54,680	150,948	313,922	571,430	1,121,568	2,488,991
Net cash farm income	123,643	-1,443	24,466	56,357	140,026	253,765	467,883
Inventory change	68,543	21,572	18,901	43,654	63,175	118,764	292,327
Depreciation	-65,264	-4,852	-13,411	-32,916	-68,787	-139,417	-234,846
Net farm income from operations	126,922	15,277	29,956	67,095	134,414	233,113	525,364
Gain or loss on capital sales	-170	-15	107	-1	840	-76	-8,341
Average net farm income	126,752	15,262	30,064	67,094	135,254	233,037	517,023
Median net farm income	83,683	11,007	31,059	79,922	136,303	190,329	458,856
<b>Profitability (cost)</b>							
Rate of return on assets	5.0 %	2.8 %	2.8 %	4.1 %	5.1 %	5.0 %	6.1 %
Rate of return on equity	5.8 %	2.2 %	1.5 %	4.3 %	6.0 %	5.7 %	7.3 %
Operating profit margin	14.4 %	10.2 %	9.5 %	12.8 %	15.2 %	13.4 %	16.3 %
Asset turnover rate	34.9 %	27.9 %	29.5 %	32.0 %	33.7 %	37.2 %	37.1 %
<b>Liquidity &amp; Repayment (end of year)</b>							
Current assets	542,944	68,520	158,874	333,374	632,155	1,173,256	2,300,128
Current liabilities	321,694	46,030	86,930	191,834	366,536	710,563	1,439,969
Current ratio	1.69	1.49	1.83	1.74	1.72	1.65	1.60
Working capital	221,250	22,490	71,944	141,541	265,619	462,693	860,160
Working capital to gross inc	32.9 %	29.0 %	37.0 %	34.7 %	34.7 %	30.9 %	29.3 %
Term debt coverage ratio	1.68	1.44	1.19	1.52	1.44	1.92	2.20
Replacement coverage ratio	1.27	1.35	1.01	1.19	1.13	1.37	1.53
Term debt to EBITDA	2.10	4.24	3.69	2.79	2.14	1.79	1.70
<b>Solvency (end of year at cost)</b>							
Number of sole proprietors	488	65	65	116	163	65	14
Total assets	2,203,918	388,767	742,414	1,515,945	2,569,790	4,594,345	7,759,088
Total liabilities	865,545	222,427	328,497	564,558	990,617	1,766,090	3,201,497
Net worth	1,338,372	166,339	413,917	951,388	1,579,173	2,828,256	4,557,590
Net worth change	78,899	25,757	37,388	56,067	88,137	142,429	305,032
Farm debt to asset ratio	42 %	61 %	47 %	41 %	41 %	42 %	43 %
Total debt to asset ratio	39 %	57 %	44 %	37 %	39 %	38 %	41 %
Change in earned net worth %	6 %	18 %	10 %	6 %	6 %	5 %	7 %
<b>Nonfarm Information</b>							
Net nonfarm income	36,008	46,294	33,599	44,345	32,147	29,000	25,772
Farms reporting living expenses	164	14	26	41	59	19	5
Total family living expense	63,864	44,233	45,272	51,289	72,960	88,745	116,747
<b>Crop Acres</b>							
Total crop acres	1,878	235	582	1,128	2,070	3,481	6,247
Total crop acres owned	473	51	159	316	618	715	1,295
Total crop acres cash rented	1,303	181	361	738	1,328	2,612	4,682
Total crop acres share rented	103	3	62	75	124	155	270
Machinery value per crop acre	344	195	240	315	329	390	362

**Financial Summary**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Age of Operator)**

	<b>Avg. Of All Farms</b>	<b>Less Than 31</b>	<b>31 - 40</b>	<b>41 - 50</b>	<b>51 - 60</b>	<b>Over 60</b>
Number of farms	531	98	105	86	152	90
<b>Income Statement</b>						
Gross cash farm income	704,566	269,512	659,215	784,219	995,069	664,464
Total cash farm expense	580,923	226,977	578,204	662,533	808,529	507,120
Net cash farm income	123,643	42,535	81,011	121,686	186,541	157,344
Inventory change	68,543	44,104	91,303	101,716	69,122	35,923
Depreciation	-65,264	-16,588	-48,656	-76,751	-98,189	-71,062
Net farm income from operations	126,922	70,050	123,658	146,651	157,474	122,205
Gain or loss on capital sales	-170	45	592	44	-1,637	982
Average net farm income	126,752	70,095	124,251	146,695	155,837	123,187
Median net farm income	83,683	45,701	82,829	99,381	121,075	77,908
<b>Profitability (cost)</b>						
Rate of return on assets	5.0 %	8.7 %	7.0 %	5.7 %	4.2 %	3.7 %
Rate of return on equity	5.8 %	16.1 %	10.4 %	7.1 %	4.4 %	3.8 %
Operating profit margin	14.4 %	17.7 %	15.9 %	14.8 %	12.9 %	14.3 %
Asset turnover rate	34.9 %	49.4 %	44.3 %	38.8 %	32.4 %	26.3 %
<b>Liquidity &amp; Repayment (end of year)</b>						
Current assets	542,944	212,990	456,793	574,010	827,523	537,035
Current liabilities	321,694	136,779	329,337	367,074	487,193	212,110
Current ratio	1.69	1.56	1.39	1.56	1.70	2.53
Working capital	221,250	76,211	127,456	206,936	340,330	324,925
Working capital to gross inc	32.9 %	24.4 %	18.2 %	27.8 %	36.1 %	59.6 %
Term debt coverage ratio	1.68	2.11	1.80	1.88	1.67	1.30
Replacement coverage ratio	1.27	1.97	1.54	1.43	1.19	0.92
Term debt to EBITDA	2.10	2.10	2.24	2.00	2.23	1.80
<b>Solvency (end of year at cost)</b>						
Number of sole proprietors	488	95	101	77	134	81
Total assets	2,203,918	760,652	1,728,964	2,272,945	3,264,070	2,669,413
Total liabilities	865,545	445,471	904,895	990,694	1,202,519	632,728
Net worth	1,338,372	315,180	824,070	1,282,251	2,061,550	2,036,685
Net worth change	78,899	62,132	87,558	84,130	88,819	66,386
Farm debt to asset ratio	42 %	59 %	54 %	47 %	40 %	27 %
Total debt to asset ratio	39 %	59 %	52 %	44 %	37 %	24 %
Change in earned net worth %	6 %	25 %	12 %	7 %	5 %	3 %
<b>Nonfarm Information</b>						
Net nonfarm income	36,008	26,481	41,777	39,445	29,027	48,159
Farms reporting living expenses	164	23	30	21	51	39
Total family living expense	63,864	40,287	65,319	72,318	71,947	61,527
<b>Crop Acres</b>						
Total crop acres	1,878	850	1,662	2,344	2,541	1,683
Total crop acres owned	473	104	236	557	686	709
Total crop acres cash rented	1,303	683	1,322	1,666	1,742	864
Total crop acres share rented	103	62	104	121	113	110
Machinery value per crop acre	344	179	285	307	390	436

**Financial Summary**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Farm Type)**

	<b>Avg. Of All Farms</b>	<b>Crop</b>	<b>Beef</b>	<b>Crop and Beef</b>	<b>Other</b>
Number of farms	531	346	50	69	59
<b>Income Statement</b>					
Gross cash farm income	704,566	814,469	234,215	475,654	572,352
Total cash farm expense	580,923	665,774	175,088	391,188	498,176
Net cash farm income	123,643	148,695	59,127	84,466	74,176
Inventory change	68,543	101,528	-18,390	-5,760	45,127
Depreciation	-65,264	-80,128	-18,362	-41,780	-42,963
Net farm income from operations	126,922	170,095	22,376	36,927	76,339
Gain or loss on capital sales	-170	-551	35	69	1,593
Average net farm income	126,752	169,544	22,411	36,995	77,933
Median net farm income	83,683	115,541	4,718	36,784	54,193
<b>Profitability (cost)</b>					
Rate of return on assets	5.0 %	5.9 %	1.5 %	1.7 %	4.5 %
Rate of return on equity	5.8 %	7.1 %	-0.5 %	-0.4 %	5.1 %
Operating profit margin	14.4 %	15.7 %	7.9 %	6.5 %	14.3 %
Asset turnover rate	34.9 %	37.4 %	18.5 %	25.6 %	31.3 %
<b>Liquidity &amp; Repayment (end of year)</b>					
Current assets	542,944	654,352	203,955	402,145	395,294
Current liabilities	321,694	363,160	120,574	297,102	311,806
Current ratio	1.69	1.80	1.69	1.35	1.27
Working capital	221,250	291,191	83,381	105,042	83,488
Working capital to gross inc	32.9 %	36.3 %	39.1 %	22.5 %	13.9 %
Term debt coverage ratio	1.68	2.20	0.81	0.77	0.71
Replacement coverage ratio	1.27	1.55	0.72	0.66	0.62
Term debt to EBITDA	2.10	1.65	4.41	4.40	3.63
<b>Solvency (end of year at cost)</b>					
Number of sole proprietors	488	311	49	67	56
Total assets	2,203,918	2,526,206	1,013,954	1,824,675	1,919,395
Total liabilities	865,545	907,682	447,210	822,739	1,052,234
Net worth	1,338,372	1,618,524	566,745	1,001,937	867,161
Net worth change	78,899	106,090	15,041	12,034	66,876
Farm debt to asset ratio	42 %	38 %	46 %	48 %	60 %
Total debt to asset ratio	39 %	36 %	44 %	45 %	55 %
Change in earned net worth %	6 %	7 %	3 %	1 %	8 %
<b>Nonfarm Information</b>					
Net nonfarm income	36,008	33,653	35,006	31,223	53,183
Farms reporting living expenses	164	95	20	32	16
Total family living expense	63,864	68,070	51,677	55,454	67,166
<b>Crop Acres</b>					
Total crop acres	1,878	2,255	483	1,592	1,185
Total crop acres owned	473	511	197	594	335
Total crop acres cash rented	1,303	1,616	268	915	793
Total crop acres share rented	103	129	18	83	56
Machinery value per crop acre	344	352	344	265	364

## 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 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. 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**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Barley on Owned Land**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	32	6	7	7
Acres	173.96	54.31	130.84	261.82
Yield per acre (bu.)	68.28	39.28	66.23	72.80
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	4.30	3.19	4.18	4.52
Other product return per acre	0.99	2.84	5.00	-
Total product return per acre	294.74	128.16	281.73	328.94
Crop insurance per acre	23.78	24.66	4.00	48.77
Other crop income per acre	2.33	-	1.57	-
Gross return per acre	320.84	152.82	287.30	377.71
<b>Direct Expenses</b>				
Seed	14.97	9.18	12.18	14.69
Fertilizer	50.69	33.19	44.61	50.71
Crop chemicals	28.70	23.41	27.21	27.80
Crop insurance	16.74	12.68	19.88	16.49
Fuel & oil	9.89	10.70	9.96	9.47
Repairs	16.17	20.98	20.62	15.34
Custom hire	3.97	2.99	16.26	2.10
Operating interest	2.41	4.52	4.74	1.29
Miscellaneous	0.81	0.02	-	0.24
Total direct expenses per acre	144.35	117.67	155.46	138.13
Return over direct exp per acre	176.49	35.15	131.84	239.58
<b>Overhead Expenses</b>				
Custom hire	1.73	0.50	1.41	2.91
Hired labor	6.89	10.36	1.36	7.71
Machinery leases	1.96	0.46	5.62	2.18
Building leases	1.24	0.33	0.11	3.30
RE & pers. property taxes	5.80	8.66	3.22	5.34
Farm insurance	4.10	3.72	3.36	3.62
Utilities	3.32	2.13	2.31	4.50
Dues & professional fees	0.75	1.02	1.39	0.60
Interest	14.55	22.17	21.64	11.56
Mach & bldg depreciation	33.86	29.08	21.17	28.79
Miscellaneous	4.87	3.00	4.08	6.65
Total overhead expenses per acre	79.07	81.43	65.69	77.17
Total dir & ovhd expenses per acre	223.42	199.10	221.16	215.29
Net return per acre	97.42	-46.28	66.14	162.42
Government payments	21.53	25.67	11.48	22.68
Net return with govt pmts	118.95	-20.61	77.62	185.10
Labor & management charge	23.11	21.71	28.74	22.30
Net return over lbr & mgt	95.84	-42.32	48.88	162.80
<b>Cost of Production</b>				
Total direct expense per bu.	2.11	3.00	2.35	1.90
Total dir & ovhd exp per bu.	3.27	5.07	3.34	2.96
Less govt & other income	2.56	3.72	3.01	1.98
With labor & management	2.90	4.27	3.44	2.28
Net value per unit	4.30	3.19	4.18	4.52
Machinery cost per acre	66.92	67.63	78.66	59.25
Est. labor hours per acre	1.16	1.83	1.22	1.15

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Barley on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	72	14	15	15
Acres	362.65	256.83	312.06	658.38
Yield per acre (bu.)	74.84	47.17	75.98	84.75
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	4.34	3.79	4.11	4.68
Other product return per acre	0.23	0.49	-	-
Total product return per acre	324.83	179.39	312.55	396.59
Crop insurance per acre	14.26	23.86	2.45	13.34
Other crop income per acre	1.81	0.70	2.38	2.77
Gross return per acre	340.89	203.95	317.39	412.71
<b>Direct Expenses</b>				
Seed	17.09	14.38	19.19	17.26
Fertilizer	52.10	44.90	52.01	57.63
Crop chemicals	34.05	30.53	31.51	35.42
Crop insurance	14.48	17.49	14.24	14.29
Fuel & oil	9.85	11.35	9.86	8.32
Repairs	19.12	20.73	23.60	16.73
Custom hire	5.53	2.30	14.25	4.33
Land rent	61.88	67.58	57.69	55.61
Operating interest	3.96	5.58	5.04	3.45
Miscellaneous	1.55	1.56	0.88	2.45
Total direct expenses per acre	219.61	216.41	228.27	215.47
Return over direct exp per acre	121.28	-12.46	89.12	197.23
<b>Overhead Expenses</b>				
Custom hire	1.31	1.39	0.44	1.42
Hired labor	9.80	10.71	8.80	10.69
Machinery leases	2.88	5.35	2.93	1.87
Building leases	1.05	0.24	1.49	1.21
Farm insurance	3.95	4.06	4.64	3.30
Utilities	2.93	2.76	2.80	3.12
Dues & professional fees	1.54	1.04	0.75	2.24
Interest	2.50	3.83	3.22	1.16
Mach & bldg depreciation	29.99	40.71	25.98	29.48
Miscellaneous	4.24	5.95	3.99	3.78
Total overhead expenses per acre	60.20	76.02	55.02	58.25
Total dir & ovhd expenses per acre	279.80	292.43	283.29	273.73
Net return per acre	61.09	-88.48	34.10	138.98
Government payments	21.70	23.47	18.33	25.30
Net return with govt pmts	82.79	-65.01	52.43	164.28
Labor & management charge	22.56	24.16	23.99	22.61
Net return over lbr & mgt	60.23	-89.17	28.44	141.67
<b>Cost of Production</b>				
Total direct expense per bu.	2.93	4.59	3.00	2.54
Total dir & ovhd exp per bu.	3.74	6.20	3.73	3.23
Less govt & other income	3.23	5.17	3.42	2.74
With labor & management	3.53	5.68	3.74	3.01
Net value per unit	4.34	3.79	4.11	4.68
Machinery cost per acre	68.79	83.26	78.68	60.52
Est. labor hours per acre	1.09	1.34	1.30	0.99

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Beans, Pinto on Owned Land**

	<u>Avg. Of All Farms</u>
Number of farms	12
Acres	214.19
Yield per acre (cwt.)	16.93
Operators share of yield %	100.00
Value per cwt.	27.76
Total product return per acre	470.02
Crop insurance per acre	19.91
Other crop income per acre	1.09
Gross return per acre	491.02
<b>Direct Expenses</b>	
Seed	48.69
Fertilizer	37.15
Crop chemicals	65.20
Crop insurance	19.53
Fuel & oil	12.84
Repairs	26.08
Custom hire	6.97
Operating interest	4.59
Miscellaneous	0.16
Total direct expenses per acre	221.22
Return over direct exp per acre	269.80
<b>Overhead Expenses</b>	
Custom hire	2.29
Hired labor	15.41
Machinery leases	4.05
RE & pers. property taxes	5.90
Farm insurance	7.07
Utilities	4.83
Dues & professional fees	0.51
Interest	21.34
Mach & bldg depreciation	51.28
Miscellaneous	3.56
Total overhead expenses per acre	116.25
Total dir & ovhd expenses per acre	337.47
Net return per acre	153.55
Government payments	21.07
Net return with govt pmts	174.62
Labor & management charge	30.45
Net return over lbr & mgt	144.17
<b>Cost of Production</b>	
Total direct expense per cwt.	13.06
Total dir & ovhd exp per cwt.	19.93
Less govt & other income	17.45
With labor & management	19.24
Net value per unit	27.76
Machinery cost per acre	102.97
Est. labor hours per acre	1.57

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Beans, Pinto on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	24	5	5
Acres	487.36	446.58	448.14
Yield per acre (cwt.)	16.34	14.73	22.11
Operators share of yield %	100.00	100.00	100.00
Value per cwt.	26.93	26.70	28.29
Total product return per acre	440.12	393.12	625.62
Crop insurance per acre	32.54	38.50	4.56
Other crop income per acre	1.46	-	2.62
Gross return per acre	474.12	431.62	632.81
<b>Direct Expenses</b>			
Seed	51.00	37.19	56.95
Fertilizer	35.56	36.97	21.74
Crop chemicals	61.66	38.65	59.00
Crop insurance	17.17	13.41	16.59
Fuel & oil	9.85	7.15	10.39
Repairs	23.81	22.87	24.33
Custom hire	1.65	-	1.34
Land rent	66.24	75.39	57.27
Operating interest	6.45	8.29	2.44
Miscellaneous	1.06	1.51	-
Total direct expenses per acre	274.45	241.42	250.06
Return over direct exp per acre	199.67	190.20	382.75
<b>Overhead Expenses</b>			
Custom hire	0.78	1.05	0.40
Hired labor	13.89	15.83	6.37
Machinery leases	5.14	1.35	3.79
Building leases	0.34	-	0.23
Farm insurance	3.94	4.05	2.49
Utilities	3.69	4.77	2.76
Dues & professional fees	0.70	1.54	0.03
Interest	4.89	3.62	4.74
Mach & bldg depreciation	33.21	37.58	29.20
Miscellaneous	5.17	4.85	2.47
Total overhead expenses per acre	71.74	74.65	52.51
Total dir & ovhd expenses per acre	346.20	316.07	302.56
Net return per acre	127.92	115.55	330.24
Government payments	19.85	22.93	16.92
Net return with govt pmts	147.78	138.49	347.16
Labor & management charge	26.61	28.05	26.43
Net return over lbr & mgt	121.17	110.44	320.73
<b>Cost of Production</b>			
Total direct expense per cwt.	16.79	16.39	11.31
Total dir & ovhd exp per cwt.	21.18	21.46	13.68
Less govt & other income	17.89	17.29	12.59
With labor & management	19.51	19.20	13.79
Net value per unit	26.93	26.70	28.29
Machinery cost per acre	76.47	71.25	72.71
Est. labor hours per acre	1.27	1.12	1.17

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Canola on Owned Land**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	40	8	8	8
Acres	246.94	228.68	218.92	412.15
Yield per acre (cwt.)	19.17	13.58	20.09	21.49
Operators share of yield %	100.00	100.00	100.00	100.00
Value per cwt.	16.40	16.69	16.34	16.60
Total product return per acre	314.35	226.56	328.28	356.81
Crop insurance per acre	4.84	1.78	0.10	13.46
Other crop income per acre	1.23	-	1.35	2.22
Gross return per acre	320.42	228.33	329.73	372.49
<b>Direct Expenses</b>				
Seed	54.31	59.26	51.43	52.42
Fertilizer	59.08	54.28	62.81	60.84
Crop chemicals	22.78	20.79	26.87	19.58
Crop insurance	13.09	15.43	12.13	11.31
Fuel & oil	10.10	10.79	11.60	7.94
Repairs	17.32	16.64	14.88	14.90
Custom hire	2.73	0.74	5.59	2.79
Operating interest	3.49	7.21	5.18	1.24
Miscellaneous	0.69	-	-	1.16
Total direct expenses per acre	183.58	185.15	190.49	172.18
Return over direct exp per acre	136.84	43.18	139.24	200.31
<b>Overhead Expenses</b>				
Custom hire	1.76	1.55	1.16	0.53
Hired labor	6.34	9.70	9.92	5.42
Machinery leases	1.00	1.24	0.51	0.54
Building leases	1.38	0.15	0.33	3.75
RE & pers. property taxes	6.37	7.65	7.39	5.61
Farm insurance	3.86	3.55	4.33	4.01
Utilities	3.03	2.74	3.07	3.41
Dues & professional fees	0.90	0.67	0.70	0.97
Interest	13.00	23.21	13.13	5.59
Mach & bldg depreciation	32.46	33.79	30.31	32.69
Miscellaneous	3.04	3.40	2.24	3.51
Total overhead expenses per acre	73.13	87.67	73.10	66.04
Total dir & ovhd expenses per acre	256.71	272.82	263.59	238.21
Net return per acre	63.71	-44.49	66.14	134.28
Government payments	25.79	22.53	27.91	26.42
Net return with govt pmts	89.50	-21.96	94.05	160.70
Labor & management charge	22.63	21.15	20.08	24.44
Net return over lbr & mgt	66.86	-43.11	73.98	136.25
<b>Cost of Production</b>				
Total direct expense per cwt.	9.58	13.64	9.48	8.01
Total dir & ovhd exp per cwt.	13.39	20.10	13.12	11.09
Less govt & other income	11.73	18.31	11.66	9.13
With labor & management	12.91	19.86	12.66	10.26
Net value per unit	16.40	16.69	16.34	16.60
Machinery cost per acre	65.15	63.08	63.49	57.78
Est. labor hours per acre	1.20	1.32	1.29	1.04

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Canola on Cash Rent**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	73	14	14	15
Acres	329.45	333.68	417.87	308.31
Yield per acre (cwt.)	18.66	15.53	18.83	20.78
Operators share of yield %	100.00	100.00	100.00	100.00
Value per cwt.	16.43	16.14	16.50	17.07
Total product return per acre	306.58	250.53	310.78	354.70
Crop insurance per acre	7.78	12.35	5.36	7.05
Other crop income per acre	2.15	0.51	5.89	2.54
Gross return per acre	316.51	263.40	322.03	364.29
<b>Direct Expenses</b>				
Seed	56.19	58.01	57.29	54.30
Fertilizer	59.65	62.33	57.51	55.41
Crop chemicals	23.33	23.57	27.29	20.99
Crop insurance	13.20	15.78	13.96	9.43
Fuel & oil	9.66	11.31	10.00	8.16
Repairs	18.49	20.29	18.80	18.57
Custom hire	5.29	8.22	1.40	6.40
Land rent	48.35	50.06	48.38	46.39
Operating interest	4.57	8.21	4.63	2.64
Miscellaneous	0.85	1.49	0.85	0.77
Total direct expenses per acre	239.79	259.27	240.09	223.05
Return over direct exp per acre	76.71	4.12	81.94	141.24
<b>Overhead Expenses</b>				
Custom hire	2.17	1.37	4.71	0.48
Hired labor	4.96	4.26	3.73	4.72
Machinery leases	2.70	3.45	0.88	4.44
Building leases	1.05	0.49	0.47	3.70
Farm insurance	3.81	4.31	3.85	3.48
Utilities	2.48	2.56	3.17	1.85
Dues & professional fees	0.89	1.94	0.83	0.85
Interest	3.29	4.79	2.64	1.38
Mach & bldg depreciation	28.43	35.44	31.18	20.29
Miscellaneous	3.29	2.43	2.60	2.84
Total overhead expenses per acre	53.08	61.03	54.05	44.03
Total dir & ovhd expenses per acre	292.87	320.30	294.14	267.07
Net return per acre	23.63	-56.91	27.89	97.22
Government payments	25.23	28.68	24.90	20.35
Net return with govt pmts	48.86	-28.23	52.79	117.57
Labor & management charge	23.54	24.31	25.68	22.41
Net return over lbr & mgt	25.32	-52.53	27.10	95.16
<b>Cost of Production</b>				
Total direct expense per cwt.	12.85	16.70	12.75	10.74
Total dir & ovhd exp per cwt.	15.70	20.63	15.62	12.85
Less govt & other income	13.81	17.95	13.70	11.41
With labor & management	15.07	19.52	15.06	12.49
Net value per unit	16.43	16.14	16.50	17.07
Machinery cost per acre	68.76	84.26	67.77	57.96
Est. labor hours per acre	1.14	1.24	1.14	1.07

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Canola on Share Rent**

	<u>Avg. Of All Farms</u>
Number of farms	14
Acres	187.34
Yield per acre (cwt.)	20.65
Operators share of yield %	62.42
Value per cwt.	16.13
Total product return per acre	207.81
Other crop income per acre	4.42
Gross return per acre	212.23
<b>Direct Expenses</b>	
Seed	35.09
Fertilizer	44.92
Crop chemicals	20.75
Crop insurance	9.71
Fuel & oil	8.75
Repairs	15.39
Custom hire	4.06
Operating interest	4.33
Miscellaneous	1.73
Total direct expenses per acre	144.73
Return over direct exp per acre	67.50
<b>Overhead Expenses</b>	
Custom hire	0.59
Hired labor	5.21
Machinery leases	2.94
Building leases	0.24
Farm insurance	2.89
Utilities	1.29
Dues & professional fees	0.56
Interest	2.08
Mach & bldg depreciation	24.90
Miscellaneous	2.47
Total overhead expenses per acre	43.17
Total dir & ovhd expenses per acre	187.90
Net return per acre	24.33
Government payments	16.36
Net return with govt pmts	40.69
Labor & management charge	18.01
Net return over lbr & mgt	22.68
<b>Cost of Production</b>	
Total direct expense per cwt.	11.23
Total dir & ovhd exp per cwt.	14.58
Less govt & other income	12.97
With labor & management	14.37
Net value per unit	16.13
Machinery cost per acre	58.09
Est. labor hours per acre	0.99

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Corn on Owned Land**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	112	22	23	23
Acres	240.31	204.09	309.10	146.36
Yield per acre (bu.)	161.94	127.46	152.52	178.29
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	3.04	2.79	3.04	3.16
Other product return per acre	0.74	4.45	-	-
Total product return per acre	492.29	359.84	463.86	563.25
Hedging gains/losses per acre	0.80	-	-	-
Crop insurance per acre	2.37	4.41	2.17	-
Other crop income per acre	0.97	1.81	1.86	-
Gross return per acre	496.44	366.06	467.89	563.25
<b>Direct Expenses</b>				
Seed	86.04	80.08	88.58	84.36
Fertilizer	99.82	85.23	89.43	88.48
Crop chemicals	24.17	22.49	22.95	23.39
Crop insurance	21.44	20.48	18.89	18.00
Drying expense	5.25	4.29	4.70	5.00
Fuel & oil	16.06	17.60	15.87	15.17
Repairs	33.91	37.47	31.51	30.22
Custom hire	5.32	6.10	7.62	4.41
Operating interest	7.66	8.71	7.34	6.03
Miscellaneous	1.19	1.74	0.66	1.41
Total direct expenses per acre	300.87	284.19	287.55	276.46
Return over direct exp per acre	195.57	81.88	180.33	286.79
<b>Overhead Expenses</b>				
Custom hire	0.99	1.05	0.84	0.89
Hired labor	14.78	15.63	11.76	6.09
Machinery leases	3.93	2.44	3.27	1.89
Building leases	0.37	0.83	0.10	0.29
RE & pers. property taxes	12.99	10.89	9.38	12.14
Farm insurance	6.10	5.73	4.49	6.29
Utilities	4.68	5.79	3.96	4.48
Dues & professional fees	2.63	1.50	0.39	3.11
Interest	34.15	29.91	31.13	23.38
Mach & bldg depreciation	55.89	58.45	52.80	49.26
Miscellaneous	4.95	5.76	3.83	6.55
Total overhead expenses per acre	141.46	137.98	121.93	114.37
Total dir & ovhd expenses per acre	442.33	422.17	409.48	390.83
Net return per acre	54.11	-56.10	58.40	172.42
Government payments	22.94	26.12	22.60	24.58
Net return with govt pmts	77.05	-29.98	81.01	197.00
Labor & management charge	37.89	38.54	34.39	36.13
Net return over lbr & mgt	39.16	-68.52	46.61	160.87
<b>Cost of Production</b>				
Total direct expense per bu.	1.86	2.23	1.89	1.55
Total dir & ovhd exp per bu.	2.73	3.31	2.68	2.19
Less govt & other income	2.56	3.02	2.51	2.05
With labor & management	2.79	3.33	2.74	2.26
Net value per unit	3.04	2.79	3.04	3.16
Machinery cost per acre	116.50	123.86	112.76	102.70
Est. labor hours per acre	1.76	2.23	1.52	1.65

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Corn on Cash Rent**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	187	37	38	38
Acres	487.39	443.38	565.69	383.90
Yield per acre (bu.)	164.27	145.89	158.56	177.40
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	3.07	2.98	3.08	3.15
Total product return per acre	504.65	435.33	489.00	558.92
Hedging gains/losses per acre	1.03	-	-	7.01
Crop insurance per acre	4.44	14.40	1.07	0.63
Other crop income per acre	0.73	0.46	0.25	0.91
Gross return per acre	510.85	450.19	490.33	567.47
<b>Direct Expenses</b>				
Seed	87.50	89.35	86.26	80.54
Fertilizer	102.70	108.61	92.05	98.78
Crop chemicals	22.99	25.14	22.74	21.40
Crop insurance	18.52	17.98	18.37	15.86
Drying expense	5.29	6.28	2.44	4.66
Fuel & oil	14.39	17.18	14.06	12.71
Repairs	31.41	43.66	29.90	25.05
Custom hire	4.82	5.72	7.00	3.84
Land rent	93.86	88.84	78.01	94.70
Operating interest	8.54	9.11	9.96	4.35
Miscellaneous	1.46	0.91	0.69	0.70
Total direct expenses per acre	391.49	412.77	361.48	362.61
Return over direct exp per acre	119.36	37.42	128.85	204.87
<b>Overhead Expenses</b>				
Custom hire	0.89	1.20	0.48	2.05
Hired labor	16.09	19.12	23.11	9.14
Machinery leases	6.59	11.57	5.99	6.97
Building leases	0.78	1.55	0.78	0.19
Farm insurance	5.35	6.10	5.67	4.29
Utilities	4.13	4.88	4.90	3.05
Dues & professional fees	3.25	2.84	2.72	1.95
Interest	5.01	7.28	5.21	3.18
Mach & bldg depreciation	45.20	51.63	43.08	38.06
Miscellaneous	4.39	5.37	4.95	3.97
Total overhead expenses per acre	91.68	111.51	96.88	72.85
Total dir & ovhd expenses per acre	483.18	524.28	458.36	435.46
Net return per acre	27.68	-74.09	31.97	132.02
Government payments	22.31	25.19	22.08	18.56
Net return with govt pmts	49.99	-48.90	54.04	150.57
Labor & management charge	36.05	39.45	34.11	33.69
Net return over lbr & mgt	13.94	-88.35	19.93	116.88
<b>Cost of Production</b>				
Total direct expense per bu.	2.38	2.83	2.28	2.04
Total dir & ovhd exp per bu.	2.94	3.59	2.89	2.45
Less govt & other income	2.77	3.32	2.74	2.30
With labor & management	2.99	3.59	2.96	2.49
Net value per unit	3.08	2.98	3.08	3.19
Machinery cost per acre	105.10	133.76	102.14	89.90
Est. labor hours per acre	1.72	1.95	1.68	1.59

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Corn on Share Rent**

	<u>Avg. Of All Farms</u>
Number of farms	12
Acres	172.27
Yield per acre (bu.)	154.00
Operators share of yield %	61.54
Value per bu.	3.16
Total product return per acre	299.41
Hedging gains/losses per acre	3.45
Crop insurance per acre	0.88
Other crop income per acre	9.42
Gross return per acre	313.16
<b>Direct Expenses</b>	
Seed	65.72
Fertilizer	89.84
Crop chemicals	20.04
Crop insurance	12.82
Drying expense	6.45
Fuel & oil	17.29
Repairs	29.18
Custom hire	1.67
Hired labor	1.56
Operating interest	7.40
Miscellaneous	3.34
Total direct expenses per acre	255.31
Return over direct exp per acre	57.85
<b>Overhead Expenses</b>	
Custom hire	2.41
Hired labor	4.62
Machinery leases	3.81
Farm insurance	4.67
Utilities	4.53
Dues & professional fees	1.25
Interest	1.65
Mach & bldg depreciation	52.16
Miscellaneous	6.22
Total overhead expenses per acre	81.31
Total dir & ovhd expenses per acre	336.62
Net return per acre	-23.46
Government payments	13.00
Net return with govt pmts	-10.46
Labor & management charge	37.51
Net return over lbr & mgt	-47.97
<b>Cost of Production</b>	
Total direct expense per bu.	2.69
Total dir & ovhd exp per bu.	3.55
Less govt & other income	3.27
With labor & management	3.67
Net value per unit	3.20
Machinery cost per acre	106.89
Est. labor hours per acre	1.93

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Corn Silage on Owned Land**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	27	5	6	6
Acres	63.80	61.78	55.03	70.08
Yield per acre (ton)	17.03	14.45	15.47	22.81
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	28.77	27.41	27.16	28.94
Total product return per acre	490.03	396.03	420.10	660.14
Other crop income per acre	0.21	-	-	-
Gross return per acre	490.24	396.03	420.10	660.14
<b>Direct Expenses</b>				
Seed	70.30	70.69	72.18	65.19
Fertilizer	54.81	87.04	42.37	35.38
Crop chemicals	18.94	26.97	17.42	13.24
Crop insurance	12.48	16.77	15.12	9.82
Fuel & oil	17.88	15.53	18.66	18.27
Repairs	32.52	36.23	31.87	24.78
Custom hire	33.82	74.51	34.55	17.56
Operating interest	6.71	6.48	5.46	8.60
Miscellaneous	2.40	-	-	0.64
Total direct expenses per acre	249.86	334.22	237.63	193.48
Return over direct exp per acre	240.37	61.81	182.47	466.66
<b>Overhead Expenses</b>				
Custom hire	1.59	0.16	0.62	0.83
Hired labor	7.37	9.76	5.83	0.02
Machinery leases	2.09	2.62	1.45	1.83
Building leases	0.10	0.56	-	-
RE & pers. property taxes	5.10	7.16	6.35	3.60
Farm insurance	4.56	8.28	3.01	3.84
Utilities	2.95	3.42	1.69	2.63
Dues & professional fees	1.23	3.22	0.89	1.32
Interest	24.14	17.12	19.04	24.92
Mach & bldg depreciation	33.55	43.02	25.74	31.21
Miscellaneous	4.13	2.48	5.93	3.75
Total overhead expenses per acre	86.81	97.79	70.56	73.94
Total dir & ovhd expenses per acre	336.67	432.01	308.19	267.42
Net return per acre	153.56	-35.97	111.91	392.72
Government payments	21.00	18.94	18.08	16.60
Net return with govt pmts	174.56	-17.03	129.99	409.32
Labor & management charge	30.55	40.07	31.65	25.62
Net return over lbr & mgt	144.01	-57.10	98.34	383.71
<b>Cost of Production</b>				
Total direct expense per ton	14.67	23.13	15.36	8.48
Total dir & ovhd exp per ton	19.77	29.90	19.93	11.72
Less govt & other income	18.52	28.59	18.76	11.00
With labor & management	20.32	31.36	20.80	12.12
Net value per unit	28.77	27.41	27.16	28.94
Machinery cost per acre	122.38	174.69	117.88	92.01
Est. labor hours per acre	2.50	2.83	3.25	1.78

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Corn Silage on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>High 20%</u>
Number of farms	21	5
Acres	67.25	62.56
Yield per acre (ton)	15.79	18.26
Operators share of yield %	100.00	100.00
Value per ton	28.86	30.26
Total product return per acre	455.73	552.60
Crop insurance per acre	1.63	-
Gross return per acre	457.36	552.60
<b>Direct Expenses</b>		
Seed	74.87	65.43
Fertilizer	80.17	66.40
Crop chemicals	16.15	12.89
Crop insurance	16.85	20.31
Fuel & oil	13.96	10.74
Repairs	27.83	21.22
Custom hire	46.37	42.77
Land rent	53.59	63.87
Operating interest	6.29	2.09
Miscellaneous	0.90	0.15
Total direct expenses per acre	336.99	305.86
Return over direct exp per acre	120.37	246.74
<b>Overhead Expenses</b>		
Custom hire	0.36	-
Hired labor	8.86	3.77
Machinery leases	1.45	-
Building leases	0.75	-
Farm insurance	3.94	2.61
Utilities	2.54	1.74
Dues & professional fees	1.55	0.53
Interest	2.13	0.97
Mach & bldg depreciation	38.53	26.94
Miscellaneous	5.67	1.99
Total overhead expenses per acre	65.80	38.55
Total dir & ovhd expenses per acre	402.79	344.40
Net return per acre	54.58	208.19
Government payments	19.60	35.39
Net return with govt pmts	74.17	243.58
Labor & management charge	33.94	29.81
Net return over lbr & mgt	40.23	213.78
<b>Cost of Production</b>		
Total direct expense per ton	21.34	16.75
Total dir & ovhd exp per ton	25.51	18.86
Less govt & other income	24.16	16.92
With labor & management	26.31	18.55
Net value per unit	28.86	30.26
Machinery cost per acre	127.76	99.93
Est. labor hours per acre	2.14	1.51

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**CRP on Owned Land**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	42	8	9	9
Acres	145.13	117.13	278.16	116.43
Yield per acre (\$)	42.14	20.75	32.52	74.40
Operators share of yield %	100.00	100.00	100.00	100.00
Value per \$	1.00	1.00	1.00	1.00
Total product return per acre	42.14	20.75	32.52	74.40
Gross return per acre	42.14	20.75	32.52	74.40
<b>Direct Expenses</b>				
Seed	0.42	-	-	2.35
Crop chemicals	0.52	0.07	0.76	-
Fuel & oil	0.52	0.52	0.45	0.74
Repairs	0.91	1.47	0.68	1.11
Total direct expenses per acre	2.63	2.40	2.29	4.28
Return over direct exp per acre	39.51	18.35	30.23	70.12
<b>Overhead Expenses</b>				
Hired labor	0.53	0.31	0.67	0.46
RE & pers. property taxes	6.60	4.94	6.08	7.66
Farm insurance	0.42	0.57	0.21	1.12
Interest	8.02	23.39	1.59	5.47
Mach & bldg depreciation	1.71	1.58	1.67	2.44
Miscellaneous	0.57	0.91	0.44	0.77
Total overhead expenses per acre	17.84	31.69	10.66	17.92
Total dir & ovhd expenses per acre	20.47	34.09	12.95	22.20
Net return per acre	21.67	-13.34	19.56	52.20

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Fallow on Owned Land**

	<u>Avg. Of All Farms</u>
Number of farms	14
Acres	73.83
Yield per acre	-
Operators share of yield %	-
Value per 0	-
Total product return per acre	-
Gross return per acre	-
<b>Direct Expenses</b>	
Crop chemicals	2.47
Fuel & oil	3.77
Repairs	5.43
Operating interest	2.06
Total direct expenses per acre	13.73
Return over direct exp per acre	-13.73
<b>Overhead Expenses</b>	
Custom hire	0.58
Hired labor	1.18
Building leases	0.13
RE & pers. property taxes	6.18
Farm insurance	2.32
Utilities	1.38
Dues & professional fees	0.89
Interest	5.76
Mach & bldg depreciation	7.12
Miscellaneous	2.34
Total overhead expenses per acre	27.88
Total dir & ovhd expenses per acre	41.61
Net return per acre	-41.61

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Flax on Owned Land**

	<u>Avg. Of All Farms</u>
Number of farms	12
Acres	164.11
Yield per acre (bu.)	22.83
Operators share of yield %	100.00
Value per bu.	8.14
Other product return per acre	0.17
Total product return per acre	185.89
Crop insurance per acre	4.39
Other crop income per acre	0.19
Gross return per acre	190.47
<b>Direct Expenses</b>	
Seed	12.71
Fertilizer	23.70
Crop chemicals	19.12
Crop insurance	9.21
Fuel & oil	7.36
Repairs	11.72
Custom hire	6.65
Operating interest	2.83
Miscellaneous	0.41
Total direct expenses per acre	93.71
Return over direct exp per acre	96.76
<b>Overhead Expenses</b>	
Hired labor	4.22
RE & pers. property taxes	4.74
Farm insurance	3.63
Utilities	2.09
Dues & professional fees	0.44
Interest	7.54
Mach & bldg depreciation	23.87
Miscellaneous	3.06
Total overhead expenses per acre	49.60
Total dir & ovhd expenses per acre	143.31
Net return per acre	47.16
Government payments	16.71
Net return with govt pmts	63.87
Labor & management charge	16.82
Net return over lbr & mgt	47.05
<b>Cost of Production</b>	
Total direct expense per bu.	4.11
Total dir & ovhd exp per bu.	6.28
Less govt & other income	5.34
With labor & management	6.08
Net value per unit	8.14
Machinery cost per acre	48.81
Est. labor hours per acre	1.16

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Flax on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of farms	13
Acres	263.50
Yield per acre (bu.)	20.32
Operators share of yield %	100.00
Value per bu.	8.65
Total product return per acre	175.86
Crop insurance per acre	1.17
Gross return per acre	177.03
<b>Direct Expenses</b>	
Seed	16.25
Fertilizer	31.34
Crop chemicals	16.99
Crop insurance	11.73
Fuel & oil	8.46
Repairs	15.49
Custom hire	6.23
Land rent	40.08
Operating interest	2.79
Miscellaneous	0.02
Total direct expenses per acre	149.37
Return over direct exp per acre	27.66
<b>Overhead Expenses</b>	
Custom hire	0.68
Hired labor	2.96
Machinery leases	1.02
Farm insurance	3.15
Utilities	2.17
Dues & professional fees	0.39
Interest	3.00
Mach & bldg depreciation	20.50
Miscellaneous	2.83
Total overhead expenses per acre	36.70
Total dir & ovhd expenses per acre	186.07
Net return per acre	-9.04
Government payments	13.37
Net return with govt pmts	4.32
Labor & management charge	17.39
Net return over lbr & mgt	-13.07
<b>Cost of Production</b>	
Total direct expense per bu.	7.35
Total dir & ovhd exp per bu.	9.16
Less govt & other income	8.44
With labor & management	9.30
Net value per unit	8.65
Machinery cost per acre	53.21
Est. labor hours per acre	0.98

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Hay, Alfalfa on Owned Land**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	28	5	5	6
Acres	99.57	100.96	68.62	78.92
Yield per acre (ton)	2.60	1.67	3.64	4.58
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	68.55	60.09	51.31	75.84
Other product return per acre	0.46	-	3.73	-
Total product return per acre	178.79	100.29	190.42	347.00
Crop insurance per acre	2.68	-	-	-
Gross return per acre	181.47	100.29	190.42	347.00
<b>Direct Expenses</b>				
Seed	0.62	3.44	-	-
Fertilizer	3.12	2.63	-	15.59
Crop insurance	1.99	1.13	4.25	0.92
Fuel & oil	8.12	8.50	8.07	8.98
Repairs	18.38	12.77	40.52	25.90
Custom hire	1.26	0.95	-	3.96
Operating interest	3.53	6.01	3.27	4.47
Miscellaneous	0.07	0.24	-	0.14
Total direct expenses per acre	37.10	35.68	56.11	59.95
Return over direct exp per acre	144.37	64.60	134.31	287.05
<b>Overhead Expenses</b>				
Custom hire	2.20	0.00	0.24	0.08
Hired labor	5.05	6.48	5.99	9.35
Machinery leases	1.26	2.84	0.43	0.40
Building leases	0.11	-	-	0.64
RE & pers. property taxes	5.55	6.34	4.25	7.73
Farm insurance	4.36	3.20	8.38	3.65
Utilities	3.09	2.14	3.33	2.54
Dues & professional fees	0.71	0.68	0.05	3.06
Interest	18.64	27.40	21.55	17.70
Mach & bldg depreciation	24.02	33.81	32.18	19.60
Miscellaneous	3.48	7.04	5.02	0.43
Total overhead expenses per acre	68.46	89.94	81.42	65.18
Total dir & ovhd expenses per acre	105.56	125.62	137.53	125.14
Net return per acre	75.91	-25.34	52.89	221.86
Government payments	9.07	10.71	14.26	12.41
Net return with govt pmts	84.98	-14.62	67.15	234.27
Labor & management charge	17.96	15.22	33.82	22.82
Net return over lbr & mgt	67.02	-29.84	33.33	211.44
<b>Cost of Production</b>				
Total direct expense per ton	14.26	21.38	15.42	13.10
Total dir & ovhd exp per ton	40.58	75.27	37.80	27.35
Less govt & other income	35.88	68.85	32.85	24.64
With labor & management	42.79	77.97	42.15	29.63
Net value per unit	68.55	60.09	51.31	75.84
Machinery cost per acre	55.00	56.07	79.35	59.89
Est. labor hours per acre	1.23	0.89	1.72	1.45

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Hay, Alfalfa on Cash Rent**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	30	6	6	6
Acres	105.99	136.58	44.48	108.78
Yield per acre (ton)	1.97	1.62	1.82	3.76
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	77.76	67.76	59.30	82.34
Total product return per acre	153.32	109.65	107.68	309.99
Crop insurance per acre	13.10	6.76	-	-
Gross return per acre	166.42	116.41	107.68	309.99
<b>Direct Expenses</b>				
Seed	1.23	0.21	-	-
Fertilizer	5.59	1.46	-	21.85
Crop insurance	3.51	4.77	3.13	0.79
Fuel & oil	7.50	7.92	4.50	9.49
Repairs	17.09	15.50	12.99	26.80
Custom hire	6.31	0.87	-	2.08
Land rent	46.13	54.09	39.50	53.61
Operating interest	5.56	9.09	2.13	3.85
Miscellaneous	1.46	4.72	-	0.27
Total direct expenses per acre	94.37	98.62	62.25	118.74
Return over direct exp per acre	72.05	17.79	45.43	191.25
<b>Overhead Expenses</b>				
Custom hire	4.32	16.73	0.01	0.04
Hired labor	5.41	3.77	0.12	9.29
Machinery leases	0.85	0.61	0.32	0.88
Building leases	0.13	-	-	0.55
Farm insurance	4.27	5.10	6.20	4.17
Utilities	2.42	2.44	2.42	1.60
Dues & professional fees	1.52	1.38	0.91	2.59
Interest	2.96	3.28	4.34	1.54
Mach & bldg depreciation	20.31	18.15	21.39	17.17
Miscellaneous	2.69	7.18	0.32	0.59
Total overhead expenses per acre	44.87	58.64	36.02	38.42
Total dir & ovhd expenses per acre	139.25	157.26	98.27	157.16
Net return per acre	27.17	-40.85	9.41	152.83
Government payments	8.84	8.11	7.82	13.30
Net return with govt pmts	36.01	-32.75	17.23	166.13
Labor & management charge	18.60	23.97	12.38	26.00
Net return over lbr & mgt	17.41	-56.72	4.85	140.14
<b>Cost of Production</b>				
Total direct expense per ton	47.87	60.94	34.28	31.54
Total dir & ovhd exp per ton	70.63	97.18	54.12	41.75
Less govt & other income	59.50	88.00	49.81	38.21
With labor & management	68.94	102.81	56.63	45.12
Net value per unit	77.76	67.76	59.30	82.34
Machinery cost per acre	57.65	61.81	42.74	57.94
Est. labor hours per acre	1.41	1.70	1.01	1.94

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Hay, Grass on Owned Land**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	29	5	6	6
Acres	103.79	53.22	171.38	33.46
Yield per acre (ton)	1.24	0.65	1.10	2.09
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	37.47	31.01	41.53	44.03
Other product return per acre	0.05	-	-	-
Total product return per acre	46.55	20.21	45.67	92.19
Crop insurance per acre	0.00	-	-	0.06
Other crop income per acre	0.11	1.30	-	-
Gross return per acre	46.66	21.50	45.67	92.25
<b>Direct Expenses</b>				
Fuel & oil	5.15	6.07	5.59	6.25
Repairs	12.06	11.45	13.30	6.87
Operating interest	2.07	3.27	2.45	2.65
Miscellaneous	0.50	-	1.01	0.32
Total direct expenses per acre	19.79	20.79	22.34	16.09
Return over direct exp per acre	26.88	0.71	23.33	76.16
<b>Overhead Expenses</b>				
Hired labor	3.89	1.57	8.23	1.66
Machinery leases	0.51	0.75	0.22	0.83
RE & pers. property taxes	2.62	3.44	2.32	1.98
Farm insurance	1.07	1.48	1.18	1.08
Utilities	0.91	1.15	1.10	0.64
Dues & professional fees	0.41	0.66	0.30	0.19
Interest	8.30	17.28	5.34	8.55
Mach & bldg depreciation	12.53	15.04	15.33	7.23
Miscellaneous	1.70	1.98	1.69	0.78
Total overhead expenses per acre	31.96	43.34	35.71	22.93
Total dir & ovhd expenses per acre	51.75	64.13	58.05	39.02
Net return per acre	-5.08	-42.63	-12.38	53.23
Government payments	0.63	-	-	5.75
Net return with govt pmts	-4.45	-42.63	-12.38	58.98
Labor & management charge	11.22	14.59	12.09	10.51
Net return over lbr & mgt	-15.67	-57.21	-24.47	48.47
<b>Cost of Production</b>				
Total direct expense per ton	15.95	31.90	20.31	7.68
Total dir & ovhd exp per ton	41.70	98.41	52.79	18.64
Less govt & other income	41.06	96.42	52.79	15.86
With labor & management	50.10	118.80	63.78	20.88
Net value per unit	37.47	31.01	41.53	44.03
Machinery cost per acre	31.08	35.04	34.85	20.58
Est. labor hours per acre	1.01	1.04	1.22	0.91

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Hay, Grass on Cash Rent**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	35	7	7	7
Acres	273.61	107.29	639.66	238.17
Yield per acre (ton)	1.07	0.93	0.88	1.60
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	41.14	33.49	40.52	48.80
Total product return per acre	43.94	31.15	35.85	78.30
Crop insurance per acre	0.34	-	-	-
Gross return per acre	44.28	31.15	35.85	78.30
<b>Direct Expenses</b>				
Fuel & oil	4.87	5.15	4.63	4.64
Repairs	13.21	17.04	11.84	8.41
Land rent	15.20	23.59	10.24	18.15
Operating interest	1.71	1.99	1.71	2.20
Miscellaneous	1.17	-	1.56	1.26
Total direct expenses per acre	36.16	47.78	29.98	34.67
Return over direct exp per acre	8.12	-16.63	5.87	43.63
<b>Overhead Expenses</b>				
Custom hire	0.13	0.94	0.11	0.00
Hired labor	4.56	1.87	7.69	2.75
Machinery leases	0.20	0.85	0.03	0.32
Farm insurance	1.36	3.01	1.30	1.06
Utilities	0.84	1.25	1.08	0.42
Dues & professional fees	0.34	0.37	0.25	0.59
Interest	0.75	2.01	0.76	0.75
Mach & bldg depreciation	12.59	35.06	12.82	8.53
Miscellaneous	1.00	0.29	1.19	1.06
Total overhead expenses per acre	21.76	45.65	25.23	15.48
Total dir & ovhd expenses per acre	57.92	93.42	55.22	50.15
Net return per acre	-13.64	-62.27	-19.36	28.15
Government payments	1.69	-	-	0.22
Net return with govt pmts	-11.95	-62.27	-19.36	28.37
Labor & management charge	10.78	15.95	8.60	10.83
Net return over lbr & mgt	-22.73	-78.22	-27.96	17.54
<b>Cost of Production</b>				
Total direct expense per ton	33.85	51.36	33.89	21.61
Total dir & ovhd exp per ton	54.22	100.43	62.40	31.25
Less govt & other income	52.32	100.43	62.40	31.12
With labor & management	62.41	117.57	72.12	37.87
Net value per unit	41.14	33.49	40.52	48.80
Machinery cost per acre	31.21	58.40	29.87	22.02
Est. labor hours per acre	1.04	1.20	1.03	0.86

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

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

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	33	6	6	7
Acres	139.42	78.44	189.97	60.47
Yield per acre (ton)	1.11	0.96	1.05	1.79
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	54.77	50.12	51.11	51.69
Other product return per acre	0.47	-	-	-
Total product return per acre	61.45	48.33	53.44	92.46
Crop insurance per acre	2.34	-	6.58	7.66
Gross return per acre	63.78	48.33	60.02	100.12
<b>Direct Expenses</b>				
Seed	0.41	2.58	-	-
Fertilizer	1.37	4.77	-	9.53
Crop insurance	1.64	2.67	2.69	2.54
Fuel & oil	5.24	6.40	5.60	4.67
Repairs	13.11	21.79	11.85	12.29
Custom hire	0.50	-	0.70	3.53
Operating interest	2.45	3.62	2.40	2.07
Miscellaneous	0.48	-	0.48	0.24
Total direct expenses per acre	25.19	41.82	23.72	34.88
Return over direct exp per acre	38.60	6.51	36.30	65.25
<b>Overhead Expenses</b>				
Custom hire	0.41	2.71	0.03	0.06
Hired labor	3.96	3.86	5.05	2.02
Machinery leases	0.45	1.33	0.32	0.27
Building leases	0.60	0.06	-	0.10
RE & pers. property taxes	4.02	4.44	3.94	5.98
Farm insurance	3.73	7.75	2.93	2.92
Utilities	2.50	4.26	2.10	2.81
Dues & professional fees	0.74	0.24	1.30	0.63
Interest	13.89	18.81	12.89	12.55
Mach & bldg depreciation	13.79	15.16	13.63	11.00
Miscellaneous	3.61	6.82	5.91	1.93
Total overhead expenses per acre	47.69	65.44	48.09	40.27
Total dir & ovhd expenses per acre	72.87	107.26	71.82	75.15
Net return per acre	-9.09	-58.93	-11.79	24.97
Government payments	6.20	8.57	6.72	2.03
Net return with govt pmts	-2.89	-50.36	-5.08	27.00
Labor & management charge	14.10	18.80	12.02	10.63
Net return over lbr & mgt	-17.00	-69.16	-17.09	16.38
<b>Cost of Production</b>				
Total direct expense per ton	22.62	43.37	22.69	19.50
Total dir & ovhd exp per ton	65.46	111.25	68.69	42.01
Less govt & other income	57.36	102.36	55.97	36.59
With labor & management	70.03	121.85	67.46	42.53
Net value per unit	54.77	50.12	51.11	51.69
Machinery cost per acre	33.82	48.81	31.40	32.76
Est. labor hours per acre	0.94	1.22	1.13	0.74

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

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

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	39	7	8	8
Acres	177.78	128.05	200.29	166.93
Yield per acre (ton)	1.29	0.69	1.25	2.00
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	51.99	55.60	48.79	53.08
Total product return per acre	66.95	38.13	60.88	106.41
Crop insurance per acre	0.40	1.32	-	-
Other crop income per acre	0.22	-	0.97	-
Gross return per acre	67.57	39.44	61.86	106.41
<b>Direct Expenses</b>				
Fertilizer	0.66	4.01	-	0.72
Crop insurance	0.16	0.67	-	-
Fuel & oil	5.14	4.29	4.91	4.71
Repairs	9.97	14.27	9.70	8.29
Custom hire	0.15	0.60	-	0.17
Land rent	22.40	28.40	17.38	31.63
Machinery leases	0.11	-	-	0.59
Operating interest	2.48	5.52	3.14	2.33
Miscellaneous	0.39	-	1.05	-
Total direct expenses per acre	41.46	57.76	36.18	48.43
Return over direct exp per acre	26.11	-18.32	25.68	57.97
<b>Overhead Expenses</b>				
Hired labor	2.80	4.42	1.35	1.90
Machinery leases	0.89	1.46	0.95	0.35
Farm insurance	2.65	3.16	3.88	1.75
Utilities	2.05	2.90	2.30	1.47
Dues & professional fees	0.48	0.70	0.28	0.23
Interest	2.70	3.90	3.18	2.57
Mach & bldg depreciation	12.41	13.78	12.52	11.45
Miscellaneous	2.73	6.38	1.74	3.11
Total overhead expenses per acre	26.70	36.71	26.19	22.82
Total dir & ovhd expenses per acre	68.17	94.47	62.37	71.25
Net return per acre	-0.59	-55.02	-0.51	35.15
Government payments	3.99	11.18	3.04	4.46
Net return with govt pmts	3.39	-43.84	2.53	39.61
Labor & management charge	11.41	12.31	10.62	12.03
Net return over lbr & mgt	-8.01	-56.15	-8.09	27.58
<b>Cost of Production</b>				
Total direct expense per ton	32.20	84.23	28.99	24.16
Total dir & ovhd exp per ton	52.93	137.76	49.98	35.55
Less govt & other income	49.36	119.53	46.76	33.32
With labor & management	58.21	137.48	55.27	39.33
Net value per unit	51.99	55.60	48.79	53.08
Machinery cost per acre	30.80	37.29	30.71	27.64
Est. labor hours per acre	0.82	0.96	0.74	0.97

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Hay, Small Grain on Owned Land**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	29	5	6	6
Acres	80.73	64.80	53.39	86.10
Yield per acre (ton)	1.99	1.41	1.90	1.73
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	57.25	55.37	57.35	64.12
Other product return per acre	0.92	-	-	4.19
Total product return per acre	114.96	77.82	108.81	114.95
Crop insurance per acre	19.03	-	-	86.24
Gross return per acre	133.99	77.82	108.81	201.18
<b>Direct Expenses</b>				
Seed	20.57	17.40	16.83	31.24
Fertilizer	16.24	21.73	17.62	13.05
Crop chemicals	7.37	6.72	12.97	5.01
Crop insurance	3.05	2.61	-	9.83
Fuel & oil	7.37	9.30	5.43	6.75
Repairs	15.26	24.39	16.38	15.77
Custom hire	4.15	2.31	9.90	3.46
Operating interest	4.04	2.55	2.07	7.67
Miscellaneous	0.68	-	-	-
Total direct expenses per acre	78.72	87.02	81.21	92.77
Return over direct exp per acre	55.26	-9.20	27.60	108.41
<b>Overhead Expenses</b>				
Custom hire	0.56	-	1.11	1.63
Hired labor	4.77	3.23	0.62	6.62
Machinery leases	1.15	0.04	0.16	1.22
Building leases	1.00	-	-	0.16
RE & pers. property taxes	4.93	10.12	4.38	3.33
Farm insurance	3.69	4.38	2.98	2.67
Utilities	2.97	4.39	2.75	1.53
Dues & professional fees	1.36	1.99	0.47	1.00
Interest	20.27	15.84	10.53	21.33
Mach & bldg depreciation	17.68	18.95	9.98	17.77
Miscellaneous	5.96	3.42	6.58	4.42
Total overhead expenses per acre	64.33	62.36	39.56	61.66
Total dir & ovhd expenses per acre	143.05	149.38	120.77	154.43
Net return per acre	-9.06	-71.56	-11.95	46.75
Government payments	15.24	9.61	26.97	7.40
Net return with govt pmts	6.17	-61.95	15.02	54.15
Labor & management charge	16.45	22.56	11.43	13.90
Net return over lbr & mgt	-10.28	-84.50	3.58	40.24
<b>Cost of Production</b>				
Total direct expense per ton	39.52	61.92	42.80	53.70
Total dir & ovhd exp per ton	71.82	106.28	63.65	89.40
Less govt & other income	54.15	99.44	49.43	32.77
With labor & management	62.42	115.49	55.46	40.82
Net value per unit	57.25	55.37	57.35	64.12
Machinery cost per acre	47.26	58.40	43.86	47.02
Est. labor hours per acre	1.19	1.48	0.88	1.13

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Hay, Small Grain on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	24	5	5
Acres	76.07	94.40	77.74
Yield per acre (ton)	2.08	1.87	3.16
Operators share of yield %	100.00	100.00	100.00
Value per ton	53.78	53.28	54.35
Other product return per acre	2.40	-	-
Total product return per acre	114.08	99.50	171.61
Other crop income per acre	0.95	-	-
Gross return per acre	115.03	99.50	171.61
<b>Direct Expenses</b>			
Seed	15.92	21.82	18.19
Fertilizer	24.08	33.00	18.78
Crop chemicals	13.72	4.06	16.40
Crop insurance	1.47	-	-
Fuel & oil	6.09	5.41	4.49
Repairs	14.95	10.18	17.60
Custom hire	9.71	1.68	-
Land rent	36.68	36.81	21.19
Operating interest	1.74	1.30	1.27
Miscellaneous	0.78	0.49	-
Total direct expenses per acre	125.14	114.75	97.92
Return over direct exp per acre	-10.12	-15.24	73.69
<b>Overhead Expenses</b>			
Custom hire	0.67	1.45	0.37
Hired labor	4.40	2.89	3.17
Machinery leases	0.59	0.82	-
Farm insurance	3.40	3.75	3.51
Utilities	2.66	2.85	1.51
Dues & professional fees	1.00	0.34	0.27
Interest	3.22	2.94	1.77
Mach & bldg depreciation	15.23	16.57	8.99
Miscellaneous	4.12	3.78	4.37
Total overhead expenses per acre	35.28	35.38	23.97
Total dir & ovhd expenses per acre	160.43	150.13	121.89
Net return per acre	-45.40	-50.63	49.72
Government payments	16.14	6.47	4.03
Net return with govt pmts	-29.26	-44.15	53.75
Labor & management charge	15.36	12.14	18.86
Net return over lbr & mgt	-44.62	-56.30	34.89
<b>Cost of Production</b>			
Total direct expense per ton	60.26	61.44	31.01
Total dir & ovhd exp per ton	77.25	80.39	38.60
Less govt & other income	67.87	76.92	37.32
With labor & management	75.26	83.42	43.30
Net value per unit	53.78	53.28	54.35
Machinery cost per acre	49.15	37.24	33.00
Est. labor hours per acre	1.15	0.83	1.42

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Oats on Owned Land**

	<u>Avg. Of All Farms</u>
Number of farms	5
Acres	51.83
Yield per acre (bu.)	97.60
Operators share of yield %	100.00
Value per bu.	2.56
Other product return per acre	6.83
Total product return per acre	257.02
Gross return per acre	257.02
<b>Direct Expenses</b>	
Seed	10.46
Fertilizer	49.58
Crop chemicals	16.39
Crop insurance	7.26
Fuel & oil	10.04
Repairs	21.64
Custom hire	17.70
Operating interest	4.33
Total direct expenses per acre	137.40
Return over direct exp per acre	119.62
<b>Overhead Expenses</b>	
Hired labor	7.09
Machinery leases	0.80
Building leases	0.49
RE & pers. property taxes	7.63
Farm insurance	3.81
Utilities	2.15
Dues & professional fees	3.31
Interest	32.66
Mach & bldg depreciation	24.01
Miscellaneous	3.48
Total overhead expenses per acre	85.43
Total dir & ovhd expenses per acre	222.83
Net return per acre	34.19
Government payments	25.82
Net return with govt pmts	60.01
Labor & management charge	20.77
Net return over lbr & mgt	39.24
<b>Cost of Production</b>	
Total direct expense per bu.	1.41
Total dir & ovhd exp per bu.	2.28
Less govt & other income	1.95
With labor & management	2.16
Net value per unit	2.56
Machinery cost per acre	76.15
Est. labor hours per acre	1.45

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Oats on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of farms	10
Acres	104.00
Yield per acre (bu.)	90.83
Operators share of yield %	100.00
Value per bu.	2.33
Total product return per acre	211.67
Gross return per acre	211.67
<b>Direct Expenses</b>	
Seed	13.35
Fertilizer	37.17
Crop chemicals	15.46
Crop insurance	5.52
Fuel & oil	9.08
Repairs	18.23
Custom hire	1.43
Land rent	45.74
Operating interest	3.25
Miscellaneous	1.14
Total direct expenses per acre	150.36
Return over direct exp per acre	61.31
<b>Overhead Expenses</b>	
Custom hire	2.54
Hired labor	5.20
Machinery leases	4.44
Building leases	1.22
Farm insurance	2.89
Utilities	2.31
Dues & professional fees	1.50
Interest	2.97
Mach & bldg depreciation	21.73
Miscellaneous	3.60
Total overhead expenses per acre	48.41
Total dir & ovhd expenses per acre	198.78
Net return per acre	12.89
Government payments	21.48
Net return with govt pmts	34.37
Labor & management charge	17.38
Net return over lbr & mgt	16.99
<b>Cost of Production</b>	
Total direct expense per bu.	1.66
Total dir & ovhd exp per bu.	2.19
Less govt & other income	1.95
With labor & management	2.14
Net value per unit	2.33
Machinery cost per acre	57.83
Est. labor hours per acre	0.99

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Pasture on Owned Land**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	78	15	15	16
Acres	669.01	328.51	588.42	1,210.60
Yield per acre (aum)	0.91	0.79	0.68	1.24
Operators share of yield %	100.00	100.00	100.00	100.00
Value per aum	22.84	17.79	20.53	25.76
Total product return per acre	20.75	14.12	14.04	31.83
Crop insurance per acre	0.29	-	-	-
Other crop income per acre	0.05	-	-	-
Gross return per acre	21.09	14.12	14.04	31.83
<b>Direct Expenses</b>				
Fuel & oil	0.29	0.54	0.38	0.24
Repairs	0.84	1.13	0.81	1.10
Total direct expenses per acre	1.62	2.46	1.52	1.48
Return over direct exp per acre	19.47	11.66	12.52	30.35
<b>Overhead Expenses</b>				
RE & pers. property taxes	2.45	4.30	2.16	2.29
Interest	9.62	25.32	5.21	10.50
Mach & bldg depreciation	0.87	1.72	0.75	0.95
Miscellaneous	1.02	1.24	0.83	1.27
Total overhead expenses per acre	13.97	32.58	8.95	15.01
Total dir & ovhd expenses per acre	15.59	35.04	10.47	16.49
Net return per acre	5.50	-20.92	3.57	15.34

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Pasture on Cash Rent**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	102	20	21	21
Acres	1,118.84	713.06	1,207.57	989.41
Yield per acre (aum)	0.81	0.87	0.65	1.17
Operators share of yield %	100.00	100.00	100.00	100.00
Value per aum	20.86	18.25	21.07	22.68
Total product return per acre	16.94	15.84	13.70	26.57
Crop insurance per acre	0.21	-	-	0.31
Other crop income per acre	0.07	-	-	0.41
Gross return per acre	17.22	15.84	13.70	27.29
<b>Direct Expenses</b>				
Crop insurance	0.18	0.51	0.05	0.17
Fuel & oil	0.35	0.58	0.24	0.39
Repairs	0.71	1.07	0.50	0.69
Land rent	14.09	24.26	12.10	11.14
Total direct expenses per acre	15.67	27.09	13.11	12.64
Return over direct exp per acre	1.55	-11.25	0.58	14.65
<b>Overhead Expenses</b>				
Farm insurance	0.22	0.52	0.18	0.15
Interest	0.16	0.59	0.11	0.09
Mach & bldg depreciation	0.84	1.65	0.52	0.94
Miscellaneous	0.61	1.13	0.44	0.57
Total overhead expenses per acre	1.83	3.88	1.26	1.75
Total dir & ovhd expenses per acre	17.51	30.96	14.37	14.39
Net return per acre	-0.28	-15.13	-0.67	12.90

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Peas, Field on Owned Land**

	<u>Avg. Of All Farms</u>
Number of farms	20
Acres	156.72
Yield per acre (bu.)	37.22
Operators share of yield %	100.00
Value per bu.	6.95
Total product return per acre	258.51
Crop insurance per acre	10.74
Other crop income per acre	1.18
Gross return per acre	270.42
<b>Direct Expenses</b>	
Seed	47.51
Fertilizer	10.67
Crop chemicals	34.61
Crop insurance	12.36
Fuel & oil	9.71
Repairs	18.91
Custom hire	7.88
Operating interest	4.74
Miscellaneous	2.06
Total direct expenses per acre	148.45
Return over direct exp per acre	121.97
<b>Overhead Expenses</b>	
Custom hire	3.34
Hired labor	11.42
Machinery leases	2.35
Building leases	0.36
RE & pers. property taxes	6.09
Farm insurance	3.59
Utilities	3.47
Dues & professional fees	0.74
Interest	26.24
Mach & bldg depreciation	33.87
Miscellaneous	5.41
Total overhead expenses per acre	96.88
Total dir & ovhd expenses per acre	245.33
Net return per acre	25.09
Government payments	19.28
Net return with govt pmts	44.38
Labor & management charge	23.00
Net return over lbr & mgt	21.38
<b>Cost of Production</b>	
Total direct expense per bu.	3.99
Total dir & ovhd exp per bu.	6.59
Less govt & other income	5.75
With labor & management	6.37
Net value per unit	6.95
Machinery cost per acre	74.65
Est. labor hours per acre	1.40

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Peas, Field on Cash Rent**

	<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
Acres	281.48	275.98	247.40	249.99
Yield per acre (bu.)	34.27	20.24	21.71	48.17
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	7.74	8.16	7.91	8.41
Other product return per acre	1.03	-	-	5.62
Total product return per acre	266.44	165.18	171.67	410.95
Crop insurance per acre	38.84	43.53	115.79	26.12
Other crop income per acre	0.49	-	2.69	-
Gross return per acre	305.77	208.71	290.15	437.08
<b>Direct Expenses</b>				
Seed	44.85	47.08	42.15	45.30
Fertilizer	10.40	19.84	11.20	6.41
Crop chemicals	38.83	37.98	40.35	39.66
Crop insurance	13.12	13.67	16.41	19.22
Fuel & oil	10.30	9.59	13.65	9.65
Repairs	19.95	21.77	24.66	17.46
Custom hire	6.54	8.09	5.76	4.47
Land rent	51.98	58.10	45.70	38.90
Machinery leases	1.50	6.61	1.25	-
Operating interest	5.27	9.77	7.83	2.51
Miscellaneous	0.79	0.05	1.21	-
Total direct expenses per acre	203.52	232.54	210.16	183.58
Return over direct exp per acre	102.25	-23.84	79.99	253.50
<b>Overhead Expenses</b>				
Custom hire	1.73	2.43	1.96	1.24
Hired labor	10.39	14.73	4.68	6.12
Machinery leases	2.32	0.60	0.10	0.16
Building leases	0.49	0.86	-	0.16
Farm insurance	4.15	5.45	3.69	4.83
Utilities	3.02	3.39	1.53	3.03
Dues & professional fees	0.75	0.71	0.93	1.36
Interest	4.06	5.43	9.12	3.03
Mach & bldg depreciation	32.76	31.05	23.06	41.09
Miscellaneous	4.42	4.47	4.31	2.71
Total overhead expenses per acre	64.08	69.10	49.37	63.73
Total dir & ovhd expenses per acre	267.60	301.64	259.53	247.30
Net return per acre	38.17	-92.94	30.62	189.77
Government payments	18.77	25.43	17.37	14.52
Net return with govt pmts	56.94	-67.50	47.99	204.29
Labor & management charge	24.01	21.09	29.20	27.45
Net return over lbr & mgt	32.93	-88.59	18.79	176.84
<b>Cost of Production</b>				
Total direct expense per bu.	5.94	11.49	9.68	3.81
Total dir & ovhd exp per bu.	7.81	14.90	11.95	5.13
Less govt & other income	6.08	11.50	5.70	4.17
With labor & management	6.78	12.54	7.04	4.74
Net value per unit	7.74	8.16	7.91	8.41
Machinery cost per acre	75.61	83.55	77.78	73.16
Est. labor hours per acre	1.24	1.19	1.28	1.43

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Soybeans on Owned Land**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	146	29	29	30
Acres	313.14	216.25	300.79	332.14
Yield per acre (bu.)	42.73	32.71	45.94	49.05
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	9.09	9.03	9.10	9.17
Total product return per acre	388.41	295.54	418.21	449.91
Hedging gains/losses per acre	1.08	-0.76	-	1.74
Crop insurance per acre	11.63	21.41	2.67	4.13
Other crop income per acre	1.54	3.67	-	0.31
Gross return per acre	402.66	319.86	420.88	456.10
<b>Direct Expenses</b>				
Seed	65.87	65.02	66.76	64.06
Fertilizer	9.30	9.72	9.31	5.29
Crop chemicals	25.34	24.44	29.05	22.14
Crop insurance	15.26	15.61	16.19	15.49
Fuel & oil	9.96	11.97	8.69	10.02
Repairs	20.41	25.97	16.62	20.44
Custom hire	3.78	7.18	5.24	5.09
Machinery leases	0.58	0.13	1.26	0.32
Operating interest	4.19	6.30	6.09	2.79
Miscellaneous	0.66	0.78	0.68	1.02
Total direct expenses per acre	155.36	167.12	159.90	146.65
Return over direct exp per acre	247.31	152.74	260.98	309.44
<b>Overhead Expenses</b>				
Custom hire	0.78	0.79	0.85	0.62
Hired labor	8.48	5.69	9.35	5.90
Machinery leases	2.26	5.36	2.68	1.24
RE & pers. property taxes	11.55	10.39	14.66	11.90
Farm insurance	5.31	5.07	6.30	5.29
Utilities	4.06	4.47	4.14	4.37
Dues & professional fees	1.95	2.37	2.04	1.72
Interest	25.21	37.47	33.33	13.32
Mach & bldg depreciation	35.02	32.34	34.88	37.41
Miscellaneous	4.87	3.90	5.15	6.19
Total overhead expenses per acre	99.49	107.86	113.38	87.96
Total dir & ovhd expenses per acre	254.84	274.98	273.28	234.61
Net return per acre	147.82	44.88	147.60	221.48
Government payments	23.90	24.91	23.40	21.97
Net return with govt pmts	171.72	69.80	171.00	243.45
Labor & management charge	24.18	22.87	25.35	24.89
Net return over lbr & mgt	147.54	46.93	145.65	218.56
<b>Cost of Production</b>				
Total direct expense per bu.	3.64	5.11	3.48	2.99
Total dir & ovhd exp per bu.	5.96	8.41	5.95	4.78
Less govt & other income	5.07	6.90	5.38	4.21
With labor & management	5.64	7.60	5.93	4.72
Net value per unit	9.12	9.01	9.10	9.21
Machinery cost per acre	73.43	83.97	73.43	75.17
Est. labor hours per acre	1.16	1.18	1.07	1.27

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Soybeans on Cash Rent**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	230	46	46	46
Acres	651.64	465.87	625.32	795.56
Yield per acre (bu.)	43.23	39.47	43.31	47.38
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	9.11	9.02	9.06	9.16
Total product return per acre	393.78	355.88	392.16	433.90
Hedging gains/losses per acre	0.16	-1.07	-0.23	0.29
Crop insurance per acre	7.12	7.43	5.65	5.40
Other crop income per acre	0.99	-	2.79	0.45
Gross return per acre	402.05	362.24	400.37	440.05
<b>Direct Expenses</b>				
Seed	63.37	64.44	63.62	62.96
Fertilizer	11.48	15.89	9.81	9.37
Crop chemicals	26.62	32.63	27.50	23.53
Crop insurance	15.47	17.07	15.22	13.04
Fuel & oil	9.47	10.55	9.97	8.31
Repairs	19.83	23.71	19.22	18.44
Custom hire	2.49	3.66	3.27	1.22
Land rent	82.44	99.83	86.55	69.07
Machinery leases	0.86	4.26	0.50	0.32
Operating interest	5.13	8.10	4.13	3.70
Miscellaneous	0.77	0.75	0.87	0.41
Total direct expenses per acre	237.93	280.90	240.64	210.36
Return over direct exp per acre	164.12	81.34	159.72	229.69
<b>Overhead Expenses</b>				
Custom hire	0.74	0.78	1.62	0.48
Hired labor	9.76	11.24	8.82	10.22
Machinery leases	4.03	6.80	1.71	3.01
Building leases	0.58	0.63	0.18	0.21
Farm insurance	4.89	5.53	5.23	4.51
Utilities	3.40	3.77	4.03	3.39
Dues & professional fees	2.61	2.89	3.07	2.23
Interest	3.23	6.17	3.74	2.58
Mach & bldg depreciation	29.84	31.93	31.19	29.04
Miscellaneous	3.57	3.60	3.32	4.24
Total overhead expenses per acre	62.65	73.33	62.91	59.92
Total dir & ovhd expenses per acre	300.58	354.23	303.55	270.28
Net return per acre	101.47	8.01	96.81	169.77
Government payments	24.14	24.76	23.82	23.69
Net return with govt pmts	125.61	32.77	120.63	193.45
Labor & management charge	23.98	24.42	24.97	23.69
Net return over lbr & mgt	101.63	8.34	95.67	169.77
<b>Cost of Production</b>				
Total direct expense per bu.	5.50	7.12	5.56	4.44
Total dir & ovhd exp per bu.	6.95	8.98	7.01	5.70
Less govt & other income	6.20	8.19	6.27	5.07
With labor & management	6.76	8.81	6.85	5.57
Net value per unit	9.11	8.99	9.05	9.16
Machinery cost per acre	68.60	86.31	69.03	61.38
Est. labor hours per acre	1.18	1.25	1.21	1.10

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Soybeans on Share Rent**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	38	7	7	8
Acres	259.75	268.07	429.61	124.18
Yield per acre (bu.)	39.24	35.45	36.80	47.35
Operators share of yield %	63.50	60.87	60.59	76.32
Value per bu.	8.98	8.82	8.92	9.12
Total product return per acre	223.77	190.33	199.02	329.54
Hedging gains/losses per acre	0.79	-	-	2.83
Crop insurance per acre	14.63	0.90	22.04	-
Other crop income per acre	3.37	-	7.95	-
Gross return per acre	242.57	191.23	229.02	332.37
<b>Direct Expenses</b>				
Seed	51.44	50.51	40.73	61.45
Fertilizer	13.77	21.04	11.91	9.60
Crop chemicals	20.80	27.17	23.64	18.82
Crop insurance	11.12	13.68	7.20	14.22
Fuel & oil	8.57	11.63	6.36	7.44
Repairs	17.69	23.75	11.94	14.22
Custom hire	0.80	0.34	0.57	2.08
Operating interest	3.58	4.12	1.34	2.58
Miscellaneous	3.66	0.53	5.70	0.57
Total direct expenses per acre	131.45	152.76	109.40	130.96
Return over direct exp per acre	111.12	38.47	119.62	201.41
<b>Overhead Expenses</b>				
Custom hire	1.16	0.60	1.54	0.20
Hired labor	4.70	5.73	4.51	0.57
Machinery leases	2.01	2.33	0.04	3.17
Farm insurance	4.09	5.19	3.19	4.97
Utilities	2.78	2.07	3.35	2.43
Dues & professional fees	1.14	2.28	0.36	0.57
Interest	1.87	2.17	1.14	2.85
Mach & bldg depreciation	31.20	27.78	33.47	28.79
Miscellaneous	3.03	3.98	3.65	2.23
Total overhead expenses per acre	51.98	52.14	51.25	45.78
Total dir & ovhd expenses per acre	183.43	204.89	160.65	176.74
Net return per acre	59.14	-13.67	68.37	155.63
Government payments	15.52	13.35	13.94	14.10
Net return with govt pmts	74.67	-0.32	82.31	169.74
Labor & management charge	20.90	19.37	17.09	22.55
Net return over lbr & mgt	53.77	-19.69	65.22	147.18
<b>Cost of Production</b>				
Total direct expense per bu.	5.28	7.08	4.91	3.62
Total dir & ovhd exp per bu.	7.36	9.50	7.20	4.89
Less govt & other income	5.98	8.84	5.23	4.42
With labor & management	6.82	9.73	6.00	5.05
Net value per unit	9.01	8.82	8.92	9.20
Machinery cost per acre	62.29	68.10	53.53	58.05
Est. labor hours per acre	0.93	0.88	0.92	0.99

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Soybeans, Food on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of farms	13
Acres	395.93
Yield per acre (bu.)	37.19
Operators share of yield %	100.00
Value per bu.	11.92
Total product return per acre	443.38
Crop insurance per acre	15.48
Other crop income per acre	1.97
Gross return per acre	460.82
<b>Direct Expenses</b>	
Seed	39.14
Fertilizer	4.95
Crop chemicals	33.56
Crop insurance	17.58
Fuel & oil	8.88
Repairs	19.30
Custom hire	1.88
Land rent	111.89
Operating interest	5.59
Miscellaneous	1.05
Total direct expenses per acre	243.81
Return over direct exp per acre	217.01
<b>Overhead Expenses</b>	
Custom hire	0.88
Hired labor	6.65
Machinery leases	4.08
Building leases	0.84
Farm insurance	5.27
Utilities	3.86
Dues & professional fees	6.42
Interest	3.99
Mach & bldg depreciation	28.43
Miscellaneous	3.25
Total overhead expenses per acre	63.65
Total dir & ovhd expenses per acre	307.46
Net return per acre	153.36
Government payments	21.52
Net return with govt pmts	174.88
Labor & management charge	29.15
Net return over lbr & mgt	145.73
<b>Cost of Production</b>	
Total direct expense per bu.	6.56
Total dir & ovhd exp per bu.	8.27
Less govt & other income	7.22
With labor & management	8.00
Net value per unit	11.92
Machinery cost per acre	65.11
Est. labor hours per acre	0.99

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Sugar Beets on Owned Land**

	<u>Avg. Of All Farms</u>
Number of farms	12
Acres	126.38
Yield per acre (ton)	23.97
Operators share of yield %	100.00
Value per ton	38.62
Total product return per acre	925.99
Crop insurance per acre	26.11
Other crop income per acre	16.30
Gross return per acre	968.40
<b>Direct Expenses</b>	
Seed	201.37
Fertilizer	121.69
Crop chemicals	103.80
Crop insurance	37.94
Fuel & oil	43.76
Repairs	111.59
Custom hire	8.84
Hired labor	31.10
Stock/quota lease	14.48
Operating interest	14.41
Miscellaneous	1.64
Total direct expenses per acre	690.64
Return over direct exp per acre	277.76
<b>Overhead Expenses</b>	
Custom hire	2.01
Hired labor	40.44
Machinery leases	16.11
Building leases	4.02
RE & pers. property taxes	33.73
Farm insurance	11.77
Utilities	7.25
Dues & professional fees	2.79
Interest	54.52
Mach & bldg depreciation	101.77
Miscellaneous	9.75
Total overhead expenses per acre	284.15
Total dir & ovhd expenses per acre	974.79
Net return per acre	-6.39
Government payments	14.77
Net return with govt pmts	8.39
Labor & management charge	79.30
Net return over lbr & mgt	-70.91
<b>Cost of Production</b>	
Total direct expense per ton	28.81
Total dir & ovhd exp per ton	40.66
Less govt & other income	38.28
With labor & management	41.58
Net value per unit	38.62
Machinery cost per acre	290.98
Est. labor hours per acre	3.70

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Sugar Beets on Cash Rent**

	<b>Avg. Of All Farms</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	22	5	5
Acres	309.00	390.62	292.08
Yield per acre (ton)	26.66	31.37	28.11
Operators share of yield %	100.00	100.00	100.00
Value per ton	35.48	33.78	34.72
Total product return per acre	946.15	1,059.46	976.02
Crop insurance per acre	8.57	-	27.03
Other crop income per acre	17.40	13.80	15.56
Gross return per acre	972.12	1,073.26	1,018.61
<b>Direct Expenses</b>			
Seed	215.76	227.97	207.94
Fertilizer	101.02	91.20	91.44
Crop chemicals	96.32	100.40	86.69
Crop insurance	36.93	31.72	33.95
Fuel & oil	43.14	39.10	43.26
Repairs	93.43	93.10	77.84
Custom hire	23.99	69.23	-
Hired labor	23.05	17.54	23.24
Land rent	137.81	154.11	107.68
Stock/quota lease	54.40	114.84	23.69
Operating interest	17.12	20.64	15.72
Miscellaneous	1.25	1.54	-
Total direct expenses per acre	844.22	961.38	711.44
Return over direct exp per acre	127.90	111.88	307.16
<b>Overhead Expenses</b>			
Custom hire	7.94	5.62	14.94
Hired labor	52.94	43.59	68.45
Machinery leases	16.32	23.87	8.95
Building leases	1.67	-	0.17
Farm insurance	8.66	4.13	8.13
Utilities	5.52	3.96	3.56
Dues & professional fees	5.11	3.46	7.00
Interest	8.78	14.44	5.03
Mach & bldg depreciation	94.95	95.75	76.76
Miscellaneous	7.37	2.14	13.64
Total overhead expenses per acre	209.26	196.97	206.64
Total dir & ovhd expenses per acre	1,053.48	1,158.35	918.08
Net return per acre	-81.36	-85.09	100.52
Government payments	14.14	9.53	13.99
Net return with govt pmts	-67.22	-75.56	114.51
Labor & management charge	94.13	88.61	78.63
Net return over lbr & mgt	-161.35	-164.17	35.88
<b>Cost of Production</b>			
Total direct expense per ton	31.66	30.65	25.31
Total dir & ovhd exp per ton	39.51	36.93	32.66
Less govt & other income	38.00	36.19	30.65
With labor & management	41.53	39.01	33.44
Net value per unit	35.48	33.78	34.72
Machinery cost per acre	286.42	337.91	225.15
Est. labor hours per acre	4.75	4.88	5.29

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Sunflowers on Owned Land**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	25	5	5	5
Acres	134.33	168.74	115.80	109.87
Yield per acre (cwt.)	19.20	13.26	20.41	24.81
Operators share of yield %	100.00	100.00	100.00	100.00
Value per cwt.	16.97	17.87	16.62	17.63
Total product return per acre	325.72	236.85	339.18	437.29
Crop insurance per acre	10.63	5.28	4.38	-
Gross return per acre	336.34	242.13	343.56	437.29
<b>Direct Expenses</b>				
Seed	39.28	42.59	32.72	36.01
Fertilizer	40.17	31.10	38.02	58.81
Crop chemicals	37.81	25.71	36.85	42.41
Crop insurance	15.72	21.38	13.11	10.39
Fuel & oil	10.89	14.28	12.01	9.26
Repairs	17.79	19.81	17.34	16.28
Custom hire	8.99	9.74	10.10	1.64
Operating interest	6.10	6.76	5.13	4.21
Miscellaneous	0.40	1.36	-	0.01
Total direct expenses per acre	177.14	172.72	165.28	179.04
Return over direct exp per acre	159.20	69.41	178.28	258.25
<b>Overhead Expenses</b>				
Custom hire	1.98	3.78	2.64	0.26
Hired labor	6.37	7.42	9.41	4.81
Machinery leases	1.60	0.86	0.58	1.04
Building leases	0.54	0.37	-	0.16
RE & pers. property taxes	5.75	5.94	5.47	5.59
Farm insurance	3.92	3.21	3.61	3.28
Utilities	2.32	2.29	3.12	1.94
Dues & professional fees	0.77	0.34	2.23	0.05
Interest	20.83	21.92	16.84	12.86
Mach & bldg depreciation	29.37	29.33	31.10	22.69
Miscellaneous	3.14	3.78	5.49	1.39
Total overhead expenses per acre	76.60	79.24	80.49	54.08
Total dir & ovhd expenses per acre	253.74	251.96	245.78	233.12
Net return per acre	82.60	-9.83	97.78	204.17
Government payments	17.25	17.00	18.32	10.01
Net return with govt pmts	99.85	7.17	116.10	214.18
Labor & management charge	22.94	22.66	20.46	29.26
Net return over lbr & mgt	76.91	-15.49	95.64	184.93
<b>Cost of Production</b>				
Total direct expense per cwt.	9.23	13.03	8.10	7.22
Total dir & ovhd exp per cwt.	13.22	19.01	12.04	9.40
Less govt & other income	11.77	17.33	10.93	8.99
With labor & management	12.96	19.03	11.93	10.17
Net value per unit	16.97	17.87	16.62	17.63
Machinery cost per acre	71.33	78.90	73.71	50.00
Est. labor hours per acre	1.14	1.29	1.12	1.32

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Sunflowers on Cash Rent**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	53	10	10	11
Acres	363.33	233.22	202.35	364.28
Yield per acre (cwt.)	19.32	15.68	20.06	24.40
Operators share of yield %	100.00	100.00	100.00	100.00
Value per cwt.	17.32	15.89	16.35	17.87
Total product return per acre	334.49	249.13	327.93	435.85
Crop insurance per acre	14.25	11.96	-	-
Other crop income per acre	1.97	-	0.32	5.16
Gross return per acre	350.72	261.08	328.25	441.00
<b>Direct Expenses</b>				
Seed	35.96	41.58	43.23	31.90
Fertilizer	37.18	43.29	30.55	37.26
Crop chemicals	36.57	30.65	42.75	36.08
Crop insurance	14.89	19.06	10.35	12.05
Fuel & oil	9.66	11.60	9.01	9.90
Repairs	17.70	23.67	13.56	15.43
Custom hire	9.91	18.00	10.91	11.62
Land rent	56.37	55.78	51.14	70.32
Operating interest	6.29	10.45	6.21	3.64
Miscellaneous	0.67	-	0.25	0.74
Total direct expenses per acre	225.20	254.07	217.97	228.96
Return over direct exp per acre	125.51	7.01	110.28	212.04
<b>Overhead Expenses</b>				
Custom hire	1.23	2.03	0.66	0.25
Hired labor	6.12	6.21	3.86	3.27
Machinery leases	3.12	4.11	2.90	3.47
Building leases	0.43	0.17	0.55	0.67
Farm insurance	3.52	3.94	3.03	2.59
Utilities	2.41	3.61	2.12	2.29
Dues & professional fees	0.82	1.67	0.69	0.51
Interest	2.78	2.76	2.71	2.71
Mach & bldg depreciation	24.67	28.80	20.20	22.52
Miscellaneous	3.05	4.76	2.01	1.65
Total overhead expenses per acre	48.14	58.06	38.74	39.93
Total dir & ovhd expenses per acre	273.35	312.13	256.71	268.89
Net return per acre	77.37	-51.05	71.54	172.11
Government payments	14.03	14.94	12.89	15.39
Net return with govt pmts	91.40	-36.11	84.43	187.49
Labor & management charge	22.94	24.24	26.45	27.64
Net return over lbr & mgt	68.46	-60.34	57.99	159.86
<b>Cost of Production</b>				
Total direct expense per cwt.	11.66	16.20	10.87	9.39
Total dir & ovhd exp per cwt.	14.15	19.90	12.80	11.02
Less govt & other income	12.58	18.19	12.14	10.18
With labor & management	13.77	19.73	13.46	11.31
Net value per unit	17.32	15.89	16.35	17.87
Machinery cost per acre	66.53	89.27	59.16	61.84
Est. labor hours per acre	1.13	1.44	1.19	1.12

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Wheat, Durum on Owned Land**

	<u>Avg. Of All Farms</u>
Number of farms	18
Acres	249.24
Yield per acre (bu.)	42.55
Operators share of yield %	100.00
Value per bu.	5.67
Total product return per acre	241.43
Crop insurance per acre	25.19
Gross return per acre	266.62
<b>Direct Expenses</b>	
Seed	24.79
Fertilizer	67.93
Crop chemicals	39.93
Crop insurance	16.87
Fuel & oil	8.50
Repairs	15.60
Custom hire	8.70
Operating interest	8.39
Miscellaneous	0.18
Total direct expenses per acre	190.90
Return over direct exp per acre	75.72
<b>Overhead Expenses</b>	
Custom hire	1.22
Hired labor	7.70
Machinery leases	1.61
Building leases	0.40
RE & pers. property taxes	5.47
Farm insurance	3.99
Utilities	2.25
Dues & professional fees	0.88
Interest	26.84
Mach & bldg depreciation	26.53
Miscellaneous	3.16
Total overhead expenses per acre	80.05
Total dir & ovhd expenses per acre	270.94
Net return per acre	-4.32
Government payments	15.37
Net return with govt pmts	11.04
Labor & management charge	19.77
Net return over lbr & mgt	-8.72
<b>Cost of Production</b>	
Total direct expense per bu.	4.49
Total dir & ovhd exp per bu.	6.37
Less govt & other income	5.41
With labor & management	5.88
Net value per unit	5.67
Machinery cost per acre	63.38
Est. labor hours per acre	1.03

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Wheat, Durum on Cash Rent**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	29	5	6	6
Acres	537.77	189.31	377.31	927.28
Yield per acre (bu.)	48.83	25.65	51.08	56.39
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	6.13	4.38	5.69	6.76
Total product return per acre	299.46	112.32	290.44	381.23
Crop insurance per acre	15.96	21.47	6.88	7.95
Other crop income per acre	0.79	-	-	-
Gross return per acre	316.21	133.78	297.31	389.18
<b>Direct Expenses</b>				
Seed	23.44	22.47	25.59	23.23
Fertilizer	59.03	54.36	68.94	59.92
Crop chemicals	38.57	31.68	41.74	40.81
Crop insurance	13.46	12.78	22.14	10.39
Fuel & oil	9.14	8.31	10.01	8.69
Repairs	18.68	16.69	16.85	19.94
Custom hire	8.42	-	12.18	5.25
Land rent	52.38	67.67	46.49	55.92
Operating interest	3.35	7.20	4.96	1.98
Miscellaneous	0.61	-	0.02	1.54
Total direct expenses per acre	227.08	221.16	248.91	227.65
Return over direct exp per acre	89.14	-87.38	48.40	161.53
<b>Overhead Expenses</b>				
Custom hire	1.04	0.82	2.99	0.95
Hired labor	9.87	9.62	8.75	13.54
Machinery leases	2.49	3.43	0.40	3.69
Building leases	0.60	1.00	0.02	0.45
Farm insurance	4.10	3.71	4.98	3.68
Utilities	2.66	2.92	3.18	3.01
Dues & professional fees	2.15	0.55	0.99	4.20
Interest	2.53	3.24	5.58	1.09
Mach & bldg depreciation	30.60	23.66	36.79	31.72
Miscellaneous	2.70	3.50	3.17	3.74
Total overhead expenses per acre	58.74	52.44	66.85	66.08
Total dir & ovhd expenses per acre	285.82	273.60	315.76	293.74
Net return per acre	30.40	-139.81	-18.45	95.44
Government payments	18.52	19.51	17.70	23.17
Net return with govt pmts	48.92	-120.31	-0.75	118.62
Labor & management charge	20.82	15.96	20.65	20.41
Net return over lbr & mgt	28.10	-136.27	-21.39	98.20
<b>Cost of Production</b>				
Total direct expense per bu.	4.65	8.62	4.87	4.04
Total dir & ovhd exp per bu.	5.85	10.67	6.18	5.21
Less govt & other income	5.13	9.07	5.70	4.66
With labor & management	5.56	9.69	6.11	5.02
Net value per unit	6.13	4.38	5.69	6.76
Machinery cost per acre	70.09	53.94	81.85	66.82
Est. labor hours per acre	1.04	0.95	1.01	1.05

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Wheat, Spring on Owned Land**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	135	27	27	27
Acres	271.06	215.80	257.64	248.78
Yield per acre (bu.)	51.05	43.68	50.54	65.03
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	4.75	4.67	4.63	4.95
Other product return per acre	1.92	1.50	0.03	0.39
Total product return per acre	244.67	205.61	234.26	322.14
Crop insurance per acre	11.26	17.32	6.88	8.76
Other crop income per acre	0.89	1.15	-	2.58
Gross return per acre	256.81	224.07	241.14	333.49
<b>Direct Expenses</b>				
Seed	14.49	16.83	13.10	17.34
Fertilizer	58.16	67.58	58.55	56.55
Crop chemicals	28.60	30.14	27.27	27.90
Crop insurance	12.99	13.18	14.99	11.45
Fuel & oil	9.43	11.26	9.09	8.91
Repairs	17.66	21.23	17.84	15.79
Custom hire	5.45	13.48	4.89	3.71
Operating interest	3.50	2.93	3.75	4.32
Miscellaneous	0.94	0.37	0.05	1.17
Total direct expenses per acre	151.24	176.99	149.53	147.14
Return over direct exp per acre	105.58	47.08	91.61	186.35
<b>Overhead Expenses</b>				
Custom hire	0.89	1.80	0.90	0.79
Hired labor	7.11	6.41	4.07	8.58
Machinery leases	1.39	1.32	0.53	2.29
RE & pers. property taxes	7.44	9.23	7.45	7.79
Farm insurance	4.63	5.06	4.46	5.49
Utilities	3.27	3.46	3.09	3.61
Dues & professional fees	1.01	0.74	0.68	1.33
Interest	17.31	25.55	10.63	18.54
Mach & bldg depreciation	32.58	36.30	31.79	32.74
Miscellaneous	4.17	4.78	5.16	3.91
Total overhead expenses per acre	79.80	94.65	68.76	85.07
Total dir & ovhd expenses per acre	231.03	271.64	218.29	232.21
Net return per acre	25.78	-47.57	22.85	101.28
Government payments	21.37	22.74	22.55	22.81
Net return with govt pmts	47.15	-24.83	45.40	124.08
Labor & management charge	21.00	22.83	21.25	23.80
Net return over lbr & mgt	26.14	-47.65	24.16	100.29
<b>Cost of Production</b>				
Total direct expense per bu.	2.96	4.05	2.96	2.26
Total dir & ovhd exp per bu.	4.53	6.22	4.32	3.57
Less govt & other income	3.83	5.24	3.74	3.04
With labor & management	4.24	5.76	4.16	3.41
Net value per unit	4.75	4.67	4.63	4.95
Machinery cost per acre	67.92	86.43	65.50	64.62
Est. labor hours per acre	1.11	1.18	1.10	1.11

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Wheat, Spring on Cash Rent**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	191	38	38	39
Acres	544.32	381.77	613.11	530.53
Yield per acre (bu.)	53.29	39.34	49.09	64.31
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	4.76	4.66	4.76	4.76
Other product return per acre	0.01	-	0.05	-
Total product return per acre	253.59	183.18	233.79	306.37
Hedging gains/losses per acre	0.06	-	-	-
Crop insurance per acre	9.95	5.04	11.80	18.32
Other crop income per acre	1.56	0.50	0.62	2.78
Gross return per acre	265.17	188.72	246.20	327.47
<b>Direct Expenses</b>				
Seed	14.79	13.48	15.38	14.75
Fertilizer	59.63	62.85	56.59	60.17
Crop chemicals	29.21	28.78	27.17	30.63
Crop insurance	13.55	13.26	14.20	14.77
Fuel & oil	8.37	9.35	7.15	8.43
Repairs	17.19	20.16	17.53	14.59
Custom hire	4.25	7.65	3.54	2.91
Land rent	55.43	53.64	47.58	53.24
Operating interest	5.47	8.42	6.75	4.26
Miscellaneous	1.77	0.37	1.06	1.14
Total direct expenses per acre	209.66	217.97	196.96	204.90
Return over direct exp per acre	55.51	-29.25	49.24	122.58
<b>Overhead Expenses</b>				
Custom hire	1.18	1.57	1.41	0.68
Hired labor	7.25	8.03	5.55	4.83
Machinery leases	3.19	3.58	2.21	4.98
Building leases	0.68	0.40	0.92	0.18
Farm insurance	3.99	4.29	3.99	3.72
Utilities	2.78	2.88	2.53	2.75
Dues & professional fees	1.09	1.91	0.70	0.79
Interest	3.39	5.56	3.13	1.84
Mach & bldg depreciation	27.14	26.77	27.38	28.85
Miscellaneous	3.34	4.76	2.69	3.18
Total overhead expenses per acre	54.03	59.75	50.51	51.78
Total dir & ovhd expenses per acre	263.68	277.71	247.47	256.68
Net return per acre	1.48	-88.99	-1.26	70.80
Government payments	20.25	15.05	18.33	23.83
Net return with govt pmts	21.74	-73.94	17.07	94.63
Labor & management charge	21.46	19.73	20.77	24.70
Net return over lbr & mgt	0.28	-93.68	-3.70	69.93
<b>Cost of Production</b>				
Total direct expense per bu.	3.93	5.54	4.01	3.19
Total dir & ovhd exp per bu.	4.95	7.06	5.04	3.99
Less govt & other income	4.35	6.54	4.41	3.29
With labor & management	4.75	7.04	4.84	3.68
Net value per unit	4.76	4.66	4.76	4.76
Machinery cost per acre	63.43	72.68	60.41	60.57
Est. labor hours per acre	1.07	1.19	0.99	0.99

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Wheat, Spring on Share Rent**

	<b>Avg. Of All Farms</b>	<b>Low 20%</b>	<b>40 - 60%</b>	<b>High 20%</b>
Number of farms	49	9	10	10
Acres	308.04	201.96	374.16	384.78
Yield per acre (bu.)	54.66	38.92	55.09	64.79
Operators share of yield %	63.62	58.93	61.46	62.55
Value per bu.	4.66	4.79	4.70	4.63
Total product return per acre	162.09	109.90	159.11	187.58
Crop insurance per acre	4.51	3.36	4.74	-
Other crop income per acre	1.31	-	2.00	1.78
Gross return per acre	167.92	113.26	165.85	189.36
<b>Direct Expenses</b>				
Seed	10.86	7.86	13.54	8.10
Fertilizer	50.19	50.09	51.49	41.03
Crop chemicals	27.40	26.81	30.79	28.35
Crop insurance	8.96	8.21	7.69	8.51
Fuel & oil	7.80	10.05	9.93	5.96
Repairs	16.11	19.86	16.01	12.03
Custom hire	3.08	1.58	1.51	1.69
Operating interest	3.44	8.71	2.93	2.20
Miscellaneous	1.65	-	4.33	0.22
Total direct expenses per acre	129.49	133.17	138.22	108.10
Return over direct exp per acre	38.43	-19.90	27.63	81.26
<b>Overhead Expenses</b>				
Custom hire	1.14	2.81	0.07	1.93
Hired labor	4.68	7.42	1.57	1.11
Machinery leases	2.23	0.33	1.75	5.29
Farm insurance	3.29	4.03	3.18	2.41
Utilities	2.41	4.38	3.05	0.98
Dues & professional fees	0.78	1.03	0.94	0.43
Interest	1.69	2.26	2.18	0.59
Mach & bldg depreciation	24.69	24.79	29.22	11.10
Miscellaneous	3.69	5.16	5.62	2.14
Total overhead expenses per acre	44.61	52.20	47.59	25.97
Total dir & ovhd expenses per acre	174.09	185.37	185.81	134.07
Net return per acre	-6.18	-72.11	-19.97	55.30
Government payments	14.15	13.06	12.11	14.34
Net return with govt pmts	7.97	-59.05	-7.85	69.64
Labor & management charge	18.90	19.65	21.06	17.44
Net return over lbr & mgt	-10.94	-78.70	-28.91	52.19
<b>Cost of Production</b>				
Total direct expense per bu.	3.72	5.81	4.08	2.67
Total dir & ovhd exp per bu.	5.01	8.08	5.49	3.31
Less govt & other income	4.43	7.37	4.93	2.91
With labor & management	4.98	8.22	5.55	3.34
Net value per unit	4.66	4.79	4.70	4.63
Machinery cost per acre	55.47	60.53	58.66	38.32
Est. labor hours per acre	1.04	1.55	0.95	0.88

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Wheat, Winter on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of farms	6
Acres	157.43
Yield per acre (bu.)	56.63
Operators share of yield %	100.00
Value per bu.	3.50
Total product return per acre	197.97
LDP income per acre	8.11
Gross return per acre	206.08
<b>Direct Expenses</b>	
Seed	14.41
Fertilizer	56.32
Crop chemicals	28.12
Crop insurance	10.32
Fuel & oil	8.13
Repairs	17.80
Custom hire	8.22
Land rent	61.25
Operating interest	3.85
Miscellaneous	1.13
Total direct expenses per acre	209.53
Return over direct exp per acre	-3.45
<b>Overhead Expenses</b>	
Hired labor	4.89
Machinery leases	6.11
Building leases	3.05
Farm insurance	5.61
Utilities	1.55
Interest	1.75
Mach & bldg depreciation	19.77
Miscellaneous	2.69
Total overhead expenses per acre	45.41
Total dir & ovhd expenses per acre	254.95
Net return per acre	-48.87
Government payments	10.25
Net return with govt pmts	-38.61
Labor & management charge	16.74
Net return over lbr & mgt	-55.35
<b>Cost of Production</b>	
Total direct expense per bu.	3.70
Total dir & ovhd exp per bu.	4.50
Less govt & other income	4.18
With labor & management	4.47
Net value per unit	3.64
Machinery cost per acre	60.72
Est. labor hours per acre	0.85

## **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.

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

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

	<b>Avg. Of All Farms</b>		<b>Low 20%</b>		<b>40 - 60%</b>		<b>High 20%</b>	
	64		12		13		13	
Number of farms								
Beef Calves sold (lb)	Quantity	35.76	Value	67.70	Quantity	90.01	Value	33.37
Transferred out (lb)		64.20		32.30		41.67		74.47
Cull sales		26.53		25.22				28.25
Other income		0.61		0.29				0.06
Purchased		-21.89		-36.72				-12.50
Transferred in		-27.17		-14.13				-47.33
Inventory change		7.74		-19.81				17.24
Gross margin		119.25		86.54				117.52
								139.46
<b>Direct Expenses</b>								
Protein Vit Minerals (lb.)	10.45	3.21	11.05	3.61	14.27	5.05	3.28	0.78
Creep / Starter (lb.)	21.89	1.53	17.52	1.85	8.36	0.93	57.27	2.70
Complete Ration (lb.)	30.36	1.58	-	-	11.51	1.71	0.83	0.05
Corn Silage (lb.)	347.34	4.96	190.21	2.32	379.08	5.83	530.53	7.50
Hay, Alfalfa (lb.)	84.49	2.48	155.53	6.22	69.78	1.94	122.86	3.60
Hay, Grass (lb.)	958.43	23.23	1,051.32	24.58	870.07	21.33	805.67	19.35
Pasture(aum)	1.37	26.31	1.46	28.88	1.43	29.52	1.13	18.18
Other feed stuffs (lb)	63.24	2.33	16.01	1.93	82.11	3.14	14.04	1.58
Veterinary		4.01		5.04		4.42		3.87
Supplies		1.74		4.39		0.86		0.97
Fuel & oil		3.47		4.05		2.73		3.11
Repairs		7.90		8.79		7.37		6.12
Custom hire		0.84		1.00		0.60		1.74
Marketing		0.79		1.75		1.04		0.06
Operating interest		1.99		2.38		1.91		1.46
Total direct expenses	86.37		96.80			88.37		71.08
Return over direct expense	32.88		-10.26			29.15		68.39
<b>Overhead Expenses</b>								
Hired labor		2.88		3.59		3.38		1.65
Farm insurance		2.37		2.60		2.42		1.48
Utilities		1.86		2.45		2.09		1.36
Dues & professional fees		0.71		0.69		0.99		0.77
Interest		2.55		5.05		1.71		1.22
Mach & bldg depreciation		8.73		10.91		8.87		6.48
Miscellaneous		2.48		2.17		1.65		1.93
Total overhead expenses	21.58		27.47			21.11		14.88
Total dir & ovhd expenses	107.94		124.27			109.48		85.96
Net return	11.31		-37.73			8.05		53.51
Labor & management charge	12.66		16.96			10.84		11.63
Net return over lbr & mgt	-1.35		-54.69			-2.80		41.88
<b>Cost of Production Per Cwt. Produced</b>								
Total direct expense per unit	86.37		96.80			88.37		71.08
Total dir& ovhd expense per unit	107.94		124.27			109.48		85.96
With other revenue adjustments	122.12		169.47			123.69		76.11
With labor and management	134.78		186.43			134.53		87.74
Est. labor hours per unit	0.94		1.45			0.82		0.78
<b>Other Information</b>								
Number of cows	176.7		122.2			246.9		148.7
Pregnancy percentage	95.0		94.7			93.0		95.3
Pregnancy loss percentage	3.1		4.9			2.8		0.5
Culling percentage	14.5		16.5			14.9		15.5
Calving percentage	92.1		90.1			90.3		94.9
Weaning percentage	87.4		84.0			85.6		91.6
Calves sold per cow	0.94		0.91			0.93		1.03
Calf death loss percent	5.0		7.3			6.1		2.5
Cow death loss percent	2.1		3.5			2.3		2.7
Average weaning weight	571		548			557		638
Lb. weaned/exposed female	499		461			477		584
Feed cost per cow	348.56		347.63			362.38		333.29
Avg wgt/ Beef Calves sold	589		580			595		609
Avg price / cwt.	131.72		132.97			130.69		129.57

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

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

	<b>Avg. Of All Farms</b>		<b>Low 20%</b>		<b>40 - 60%</b>		<b>High 20%</b>	
	64		12		13		13	
Number of farms								
Beef Calves sold (lb)	Quantity	189.9	Value	339.1	Value	133.2	Value	192.4
Transferred out (lb)		341.0		458.40		208.77		513.00
Cull sales		140.93		126.35		147.41		158.30
Other income		3.23		1.45		0.31		0.91
Purchased		-116.28		-183.95		-65.22		-53.06
Transferred in		-144.32		-70.80		-246.96		-163.37
Inventory change		41.09		-99.23		89.97		116.09
Gross margin		633.40		433.54		613.24		864.85
<b>Direct Expenses</b>								
Protein Vit Minerals (lb.)	55.5	17.04	55.4	18.09	74.5	26.37	20.3	4.86
Creep / Starter (lb.)	116.3	8.13	87.8	9.26	43.6	4.83	355.1	16.77
Complete Ration (lb.)	161.3	8.40	-	-	60.0	8.92	5.2	0.34
Corn Silage (lb.)	1,844.9	26.35	952.9	11.64	1,978.0	30.43	3,290.0	46.49
Hay, Alfalfa (lb.)	448.7	13.15	779.1	31.14	364.1	10.11	761.9	22.30
Hay, Grass (lb.)	5,090.7	123.37	5,266.8	123.14	4,540.0	111.29	4,996.2	119.99
Pasture(aum)	7.3	139.73	7.3	144.70	7.5	154.05	7.0	112.72
Other feed stuffs (lb)	335.9	12.38	80.2	9.67	428.5	16.39	87.1	9.82
Veterinary		21.32		25.27		23.06		24.02
Supplies		9.23		21.97		4.50		5.99
Fuel & oil		18.43		20.31		14.23		19.31
Repairs		41.94		44.06		38.45		37.95
Custom hire		4.46		4.99		3.12		10.78
Marketing		4.21		8.76		5.43		0.36
Operating interest		10.59		11.92		9.95		9.06
Total direct expenses		458.74		484.92		461.11		440.77
Return over direct expense		174.67		-51.38		152.13		424.08
<b>Overhead Expenses</b>								
Hired labor		15.32		17.98		17.63		10.21
Farm insurance		12.58		13.05		12.61		9.18
Utilities		9.88		12.30		10.92		8.43
Dues & professional fees		3.76		3.46		5.17		4.75
Interest		13.52		25.32		8.93		7.55
Mach & bldg depreciation		46.36		54.65		46.29		40.21
Miscellaneous		13.18		10.88		8.59		11.95
Total overhead expenses		114.61		137.64		110.14		92.27
Total dir & ovhd expenses		573.34		622.56		571.25		533.04
Net return		60.06		-189.02		41.99		331.81
Labor & management charge		67.23		84.96		56.57		72.12
Net return over lbr & mgt		-7.16		-273.98		-14.59		259.69
<b>Cost of Production Per Cwt. Produced</b>								
Total direct expense per unit		86.37		96.80		88.37		71.08
Total dir& ovhd expense per unit		107.94		124.27		109.48		85.96
With other revenue adjustments		122.12		169.47		123.69		76.11
With labor and management		134.78		186.43		134.53		87.74
Est. labor hours per unit		4.97		7.28		4.26		4.81
<b>Other Information</b>								
Number of cows		176.7		122.2		246.9		148.7
Pregnancy percentage		95.0		94.7		93.0		95.3
Pregnancy loss percentage		3.1		4.9		2.8		0.5
Culling percentage		14.5		16.5		14.9		15.5
Calving percentage		92.1		90.1		90.3		94.9
Weaning percentage		87.4		84.0		85.6		91.6
Calves sold per cow		0.94		0.91		0.93		1.03
Calf death loss percent		5.0		7.3		6.1		2.5
Cow death loss percent		2.1		3.5		2.3		2.7
Average weaning weight		571		548		557		638
Lb. weaned/exposed female		499		461		477		584
Feed cost per cow		348.56		347.63		362.38		333.29
Avg wgt/ Beef Calves sold		589		580		595		609
Avg price / cwt.		131.72		132.97		130.69		129.57

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

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

	<b>Avg. Of All Farms</b>		<b>Low 20%</b>		<b>40 - 60%</b>		<b>High 20%</b>	
	32		6		7		7	
Number of farms								
Beef Calves sold (lb)	Quantity	49.12	Value	92.57	Quantity	144.26	Value	57.33
Transferred out (lb)		43.69		-		56.14		34.31
Cull sales		19.96		17.66			24.70	11.11
Other income		0.31		0.26		0.14		0.78
Purchased		-13.01		-30.55			-6.43	-4.75
Transferred in		-21.32		-			-22.23	-13.65
Inventory change		-2.38		-57.85			10.41	-12.97
Gross margin		116.57		73.79			133.02	106.04
<b>Direct Expenses</b>								
Protein Vit Minerals (lb.)	17.49	3.49	10.53	2.03	15.94	3.60	10.08	1.49
Corn (bu.)	0.92	2.76	2.96	9.01	1.15	3.47	-	-
Corn Silage (lb.)	615.64	9.05	578.15	9.40	991.47	14.71	499.22	6.78
Hay, Alfalfa (lb.)	132.51	3.65	464.94	10.12	144.01	5.21	-	-
Hay, Grass (lb.)	892.70	20.79	813.57	20.71	683.91	16.50	739.06	15.78
Pasture (aum)	1.17	21.29	1.34	19.46	1.10	22.32	1.06	18.56
DDGS, dry (lb.)	522.59	7.94	326.46	4.13	1,252.15	20.00	162.60	1.95
Other feed stuffs (lb)	145.12	3.46	249.89	3.03	79.35	2.59	63.74	1.07
Breeding fees		0.70		0.93		1.39		-
Veterinary		5.87		5.81		5.62		4.24
Supplies		4.50		7.19		2.29		2.85
Fuel & oil		4.19		6.22		2.62		2.35
Repairs		8.54		12.80		4.87		4.96
Custom hire		2.31		2.79		1.92		0.18
Utilities		0.81		1.81		0.49		0.75
Marketing		1.29		-		1.44		0.36
Operating interest		2.08		2.34		2.12		1.00
Total direct expenses	102.72		117.76		111.15			62.31
Return over direct expense	13.86		-43.97		21.87			43.74
<b>Overhead Expenses</b>								
Farm insurance		2.41		3.69		1.50		0.93
Interest		3.55		3.97		1.06		3.10
Mach & bldg depreciation		8.45		9.86		6.13		6.68
Miscellaneous		5.01		4.18		5.79		1.74
Total overhead expenses	19.43		21.69		14.49			12.45
Total dir & ovhd expenses	122.15		139.45		125.64			74.75
Net return	-5.58		-65.66		7.39			31.29
Labor & management charge	14.28		14.22		12.06			13.46
Net return over lbr & mgt	-19.86		-79.88		-4.67			17.83
<b>Cost of Production Per Cwt. Produced</b>								
Total direct expense per unit	102.72		117.76		111.15			62.31
Total dir& ovhd expense per unit	122.15		139.45		125.64			74.75
With other revenue adjustments	135.26		170.73		132.99			84.87
With labor and management	149.55		184.95		145.04			98.33
Est. labor hours per unit	0.97		1.17		0.77			0.71
<b>Other Information</b>								
Number of cows		127.0		123.2		184.0		78.5
Pregnancy percentage		93.4		93.5		96.3		94.7
Pregnancy loss percentage		2.1		2.8		1.3		3.1
Culling percentage		10.4		9.3		12.0		6.2
Calving percentage		91.5		90.9		95.1		91.7
Weaning percentage		86.6		87.0		90.6		88.6
Calves sold per cow		0.77		0.77		0.71		0.79
Calf death loss percent		4.8		5.0		5.4		5.0
Cow death loss percent		1.3		1.6		1.6		1.5
Average weaning weight		527		538		484		502
Lb. weaned/exposed female		456		468		439		444
Feed cost per cow		393.45		400.26		482.40		255.25
Avg wgt/ Beef Calves sold		649		617		734		623
Avg price / cwt.		149.86		155.84		151.30		140.38

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

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

	<b>Avg. Of All Farms</b>		<b>Low 20%</b>		<b>40 - 60%</b>		<b>High 20%</b>	
	32		6		7		7	
Number of farms								
Beef Calves sold (lb)	Quantity 266.8	Value 399.91	Quantity 475.8	Value 741.49	Quantity 187.5	Value 283.72	Quantity 320.7	Value 450.23
Transferred out (lb)	237.4	322.68	-	-	306.3	406.16	191.9	251.96
Cull sales	108.47		90.76			134.78		62.17
Other income	1.71		1.35			0.78		4.37
Purchased	-70.71		-157.01			-35.10		-26.56
Transferred in	-115.81		-			-121.31		-76.38
Inventory change	-12.91		-297.32			56.81		-72.56
Gross margin	633.33		379.28			725.85		593.22
<b>Direct Expenses</b>								
Protein Vit Minerals (lb.)	95.0	18.97	54.1	10.41	87.0	19.64	56.4	8.34
Corn (bu.)	5.0	15.01	15.2	46.29	6.3	18.94	-	-
Corn Silage (lb.)	3,344.7	49.15	2,971.6	48.31	5,409.9	80.27	2,792.7	37.90
Hay, Alfalfa (lb.)	719.9	19.82	2,389.7	52.02	785.8	28.42	-	-
Hay, Grass (lb.)	4,850.0	112.94	4,181.6	106.43	3,731.8	90.04	4,134.4	88.28
Pasture (aum)	6.3	115.68	6.9	100.00	6.0	121.81	5.9	103.85
DDGS, dry (lb.)	2,839.2	43.12	1,677.9	21.24	6,832.3	109.12	909.6	10.92
Other feed stuffs (lb)	788.4	18.78	1,284.4	15.55	433.0	14.15	356.6	5.97
Breeding fees	3.79		4.77			7.57		-
Veterinary	31.89		29.84			30.65		23.69
Supplies	24.47		36.97			12.50		15.93
Fuel & oil	22.76		31.95			14.30		13.15
Repairs	46.42		65.81			26.55		27.76
Custom hire	12.54		14.33			10.48		1.00
Utilities	4.38		9.31			2.66		4.20
Marketing	7.04		-			7.84		1.99
Operating interest	11.32		12.03			11.55		5.58
Total direct expenses	558.05		605.27			606.50		348.55
Return over direct expense	75.28		-225.99			119.35		244.67
<b>Overhead Expenses</b>								
Farm insurance	13.10		18.94			8.21		5.18
Utilities	6.65		6.58			6.03		4.06
Interest	19.31		20.42			5.80		17.33
Mach & bldg depreciation	45.93		50.67			33.45		37.38
Miscellaneous	20.58		14.88			25.58		5.68
Total overhead expenses	105.58		111.49			79.05		69.63
Total dir & ovhd expenses	663.63		716.76			685.55		418.17
Net return	-30.30		-337.48			40.30		175.05
Labor & management charge	77.61		73.07			65.78		75.31
Net return over lbr & mgt	-107.90		-410.55			-25.48		99.74
<b>Cost of Production Per Cwt. Produced</b>								
Total direct expense per unit	102.72		117.76			111.15		62.31
Total dir& ovhd expense per unit	122.15		139.45			125.64		74.75
With other revenue adjustments	135.26		170.73			132.99		84.87
With labor and management	149.55		184.95			145.04		98.33
Est. labor hours per unit	5.24		6.02			4.22		3.97
<b>Other Information</b>								
Number of cows	127.0		123.2			184.0		78.5
Pregnancy percentage	93.4		93.5			96.3		94.7
Pregnancy loss percentage	2.1		2.8			1.3		3.1
Culling percentage	10.4		9.3			12.0		6.2
Calving percentage	91.5		90.9			95.1		91.7
Weaning percentage	86.6		87.0			90.6		88.6
Calves sold per cow	0.77		0.77			0.71		0.79
Calf death loss percent	4.8		5.0			5.4		5.0
Cow death loss percent	1.3		1.6			1.6		1.5
Average weaning weight	527		538			484		502
Lb. weaned/exposed female	456		468			439		444
Feed cost per cow	393.45		400.26			482.40		255.25
Avg wgt/ Beef Calves sold	649		617			734		623
Avg price / cwt.	149.86		155.84			151.30		140.38

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Beef Cow-Calf (shares) -- Average Per Cwt. Produced**

	<u>Avg. Of All Farms</u>
Number of farms	10
Beef Calves sold (lb)	Quantity
Transferred out (lb)	80.58
Cull sales	5.64
Other income	-
Inventory change	-5.38
Gross margin	128.39
<b>Direct Expenses</b>	
Protein Vit Minerals (lb.)	20.02
Corn (bu.)	0.44
Corn Silage (lb.)	180.76
Hay, Grass (lb.)	1,102.41
Pasture (aum)	1.06
Other feed stuffs (lb.)	100.71
Veterinary	5.49
Supplies	0.57
Fuel & oil	3.00
Repairs	5.70
Custom hire	2.04
Livestock leases	37.74
Marketing	0.22
Operating interest	1.82
Total direct expenses	117.96
Return over direct expense	10.42
<b>Overhead Expenses</b>	
Custom hire	0.12
Hired labor	1.70
Farm insurance	1.24
Utilities	1.67
Interest	2.03
Mach & bldg depreciation	6.43
Miscellaneous	2.60
Total overhead expenses	15.79
Total dir & ovhd expenses	133.75
Net return	-5.36
Labor & management charge	9.11
Net return over lbr & mgt	-14.47
<b>Cost of Production Per Cwt. Produced</b>	
Total direct expense per unit	117.96
Total dir& ovhd expense per unit	133.75
With other revenue adjustments	133.49
With labor and management	142.61
Est. labor hours per unit	0.78
<b>Other Information</b>	
Number of cows	84.0
Pregnancy percentage	96.5
Pregnancy loss percentage	0.1
Culling percentage	15.0
Calving percentage	96.4
Weaning percentage	90.4
Calves sold per cow	1.00
Calf death loss percent	4.8
Cow death loss percent	1.0
Average weaning weight	556
Lb. weaned/exposed female	502
Feed cost per cow	351.13
Avg wgt/ Beef Calves sold	549
Avg price / cwt.	128.68

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Beef Cow-Calf (shares) -- Average Per Cow**

	<u>Avg. Of All Farms</u>
Number of farms	10
Beef Calves sold (lb)	Quantity
Transferred out (lb)	461.0
Cull sales	32.24
Other income	-
Inventory change	-30.79
Gross margin	734.45
<b>Direct Expenses</b>	
Protein Vit Minerals (lb.)	114.6
Corn (bu.)	2.5
Corn Silage (lb.)	1,034.1
Hay, Grass (lb.)	6,306.5
Pasture (aum)	6.0
Other feed stuffs (lb)	576.1
Veterinary	16.38
Supplies	31.40
Fuel & oil	3.25
Repairs	17.14
Custom hire	32.63
Livestock leases	11.64
Marketing	215.92
Operating interest	1.28
Total direct expenses	10.42
Return over direct expense	674.82
<b>Overhead Expenses</b>	
Custom hire	59.63
Hired labor	0.66
Farm insurance	9.70
Utilities	7.09
Interest	9.54
Mach & bldg depreciation	11.64
Miscellaneous	36.81
Total overhead expenses	14.88
Total dir & ovhd expenses	90.31
Net return	765.13
Labor & management charge	-30.68
Net return over lbr & mgt	52.12
<b>Cost of Production Per Cwt. Produced</b>	
Total direct expense per unit	-82.80
Total dir& ovhd expense per unit	117.96
With other revenue adjustments	133.75
With labor and management	133.49
Est. labor hours per unit	142.61
<b>Other Information</b>	
Est. labor hours per unit	4.47
Number of cows	84.0
Pregnancy percentage	96.5
Pregnancy loss percentage	0.1
Culling percentage	15.0
Calving percentage	96.4
Weaning percentage	90.4
Calves sold per cow	1.00
Calf death loss percent	4.8
Cow death loss percent	1.0
Average weaning weight	556
Lb. weaned/exposed female	502
Feed cost per cow	351.13
Avg wgt/ Beef Calves sold	549
Avg price / cwt.	128.68

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

**Beef Replacement Heifers -- Average Per Head**

	<b>Avg. Of All Farms</b>		<b>Low 20%</b>		<b>40 - 60%</b>		<b>High 20%</b>	
Number of farms	44		8		9		9	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Beef Replace sold (hd)	0.11	144.50	0.14	181.64	0.09	86.21	0.06	73.19
Transferred out (hd)	0.89	1,254.07	0.83	1,106.51	1.04	1,347.86	0.95	1,454.17
Cull sales (hd)	0.01	11.21	0.02	16.58	0.00	2.51	0.03	26.38
Other income		0.49		-		-		-
Purchased (hd)	0.06	-65.90	0.22	-252.57	-	-	-	-
Transferred in (hd)	0.70	-654.48	0.59	-480.85	1.02	-975.24	0.74	-717.64
Inventory change (hd)	-0.26	-310.79	-0.19	-307.72	-0.11	-145.84	-0.31	-311.82
Gross margin		379.10		263.60		315.50		524.27
<b>Direct Expenses</b>								
Protein Vit Minerals (lb.)	43.74	11.79	39.21	17.06	28.55	8.41	54.27	9.19
Creep / Starter (lb.)	31.94	2.55	77.83	7.09	26.57	1.83	-	-
Complete Ration (lb.)	74.09	2.55	338.16	10.74	-	-	26.96	1.75
Corn (bu.)	5.25	15.40	6.39	16.92	1.86	5.86	1.34	3.05
Corn Silage (lb.)	1,971.96	29.63	2,039.40	23.43	1,103.95	14.92	1,631.91	25.10
Hay, Alfalfa (lb.)	427.25	9.60	579.71	16.29	-	-	862.75	16.90
Hay, Grass (lb.)	2,461.75	60.99	2,832.53	66.15	2,050.55	55.77	2,580.10	65.36
Pasture (aum)	3.97	77.94	3.83	81.33	4.67	101.91	2.75	53.38
DDGS, dry (lb.)	192.58	8.77	177.13	5.31	212.09	12.56	245.10	10.98
DDGS, wet (lb.)	5.41	0.97	26.84	4.79	-	-	-	-
Other feed stuffs (lb.)	263.15	8.46	26.87	0.73	230.14	6.30	362.44	6.96
Breeding fees		9.29		31.38		-		4.00
Veterinary		12.59		21.49		13.20		6.91
Supplies		5.02		3.95		2.01		5.20
Fuel & oil		3.74		2.46		4.88		3.51
Repairs		7.26		6.45		9.65		6.05
Custom hire		2.75		3.00		1.34		1.23
Total direct expenses		269.31		318.59		238.63		219.56
Return over direct expense		109.79		-54.99		76.87		304.71
<b>Overhead Expenses</b>								
Hired labor		3.09		0.97		0.92		2.48
Farm insurance		2.47		2.63		2.87		2.14
Interest		2.37		1.11		2.62		0.65
Mach & bldg depreciation		8.73		3.32		8.65		10.23
Miscellaneous		6.93		5.58		7.61		4.39
Total overhead expenses		23.59		13.61		22.67		19.89
Total dir & ovhd expenses		292.90		332.20		261.31		239.45
Net return		86.20		-68.60		54.20		284.82
Labor & management charge		14.01		10.27		15.18		12.11
Net return over lbr & mgt		72.19		-78.87		39.02		272.71
Est. labor hours per unit		0.97		0.66		1.10		0.91
<b>Other Information</b>								
No. purchased or trans in		32		38		41		33
Number sold or trans out		42		46		45		46
Average number of head		42		47		40		45
Percentage death loss		0.3		0.4		-		0.2
Feed cost per average head		228.66		249.85		207.56		192.67
Feed cost/head sold/trans		227.92		255.75		184.10		190.34

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

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

	<b>Avg. Of All Farms</b>		<b>Low 20%</b>		<b>40 - 60%</b>		<b>High 20%</b>	
Number of farms	44		8		9		9	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Beef Replace sold (hd)	0.1	144.04	0.1	185.93	0.1	76.46	0.1	72.30
Transferred out (hd)	0.9	1,250.04	0.9	1,132.65	0.9	1,195.50	0.9	1,436.56
Cull sales (hd)	0.0	11.17	0.0	16.97	0.0	2.23	0.0	26.06
Other income		0.49		-		-		-
Purchased (hd)	0.1	-65.69	0.2	-258.54	-	-	-	-
Transferred in (hd)	0.7	-652.38	0.6	-492.21	0.9	-864.99	0.7	-708.95
Inventory change (hd)	-0.3	-309.79	-0.2	-314.99	-0.1	-129.36	-0.3	-308.05
Gross margin		377.88		269.83		279.84		517.93
<b>Direct Expenses</b>								
Protein Vit Minerals (lb.)	43.6	11.75	40.1	17.46	25.3	7.46	53.6	9.08
Creep / Starter (lb.)	31.8	2.54	79.7	7.26	23.6	1.63	-	-
Complete Ration (lb.)	73.9	2.54	346.2	10.99	-	-	26.6	1.73
Corn (bu.)	5.2	15.35	6.5	17.32	1.6	5.20	1.3	3.01
Corn Silage (lb.)	1,965.6	29.54	2,087.6	23.98	979.2	13.23	1,612.2	24.80
Hay, Alfalfa (lb.)	425.9	9.57	593.4	16.68	-	-	852.3	16.70
Hay, Grass (lb.)	2,453.8	60.79	2,899.5	67.71	1,818.7	49.46	2,548.9	64.57
Pasture (aum)	4.0	77.69	3.9	83.25	4.1	90.39	2.7	52.73
DDGS, dry (lb.)	192.0	8.74	181.3	5.44	188.1	11.14	242.1	10.85
DDGS, wet (lb.)	5.4	0.96	27.5	4.90	-	-	-	-
Other feed stuffs (lb.)	262.3	8.44	27.5	0.75	204.1	5.59	358.1	6.87
Breeding fees	9.26		32.13		-	-	-	3.95
Veterinary	12.55		22.00		-	11.71	-	6.82
Supplies	5.01		4.05		-	1.78	-	5.14
Fuel & oil	3.73		2.52		-	4.33	-	3.46
Repairs	7.24		6.61		-	8.56	-	5.97
Custom hire	2.75		3.07		-	1.19	-	1.21
Total direct expenses	268.45		326.12		-	211.65	-	216.90
Return over direct expense	109.44		-56.29		-	68.18	-	301.02
<b>Overhead Expenses</b>								
Hired labor	3.08		0.99		-	0.82	-	2.45
Farm insurance	2.46		2.70		-	2.55	-	2.12
Interest	2.36		1.14		-	2.32	-	0.64
Mach & bldg depreciation	8.71		3.40		-	7.67	-	10.11
Miscellaneous	6.91		5.71		-	6.75	-	4.34
Total overhead expenses	23.52		13.93		-	20.11	-	19.65
Total dir & ovhd expenses	291.96		340.05		-	231.77	-	236.55
Net return	85.92		-70.22		-	48.07	-	281.37
Labor & management charge	13.97		10.52		-	13.46	-	11.96
Net return over lbr & mgt	71.95		-80.73		-	34.61	-	269.41
Est. labor hours per unit	0.97		0.67		-	0.97	-	0.90
<b>Other Information</b>								
No. purchased or trans in	32		38		-	41	-	33
Number sold or trans out	42		46		-	45	-	46
Average number of head	42		47		-	40	-	45
Percentage death loss	0.3		0.4		-	-	-	0.2
Feed cost per average head	228.66		249.85		-	207.56	-	192.67
Feed cost/head sold/trans	227.92		255.75		-	184.10	-	190.34

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

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

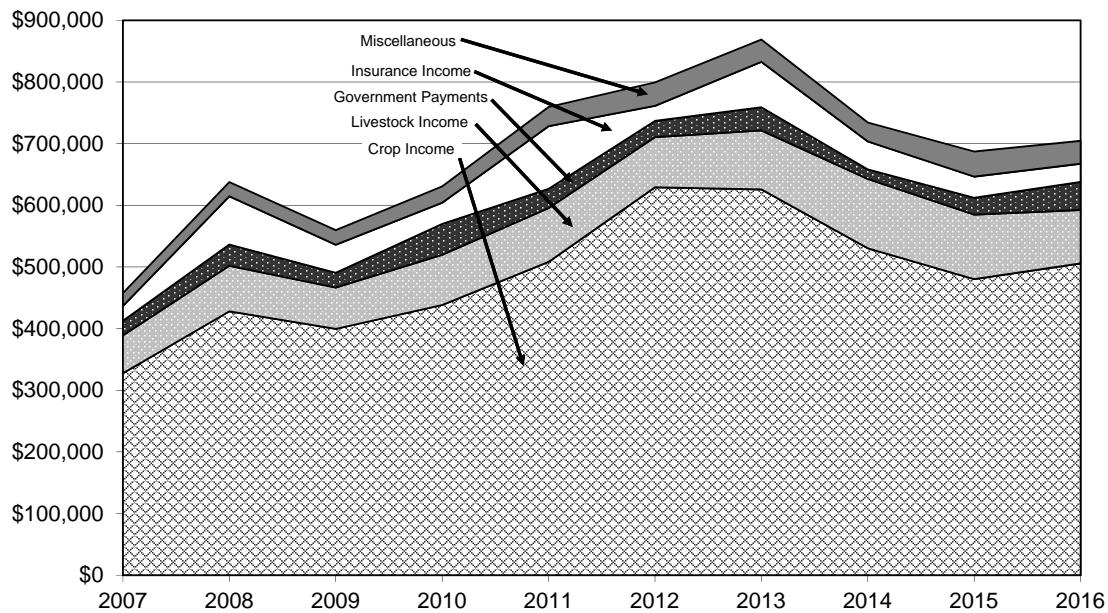
	<b>Avg. Of All Farms</b>		<b>Low 20%</b>		<b>40 - 60%</b>		<b>High 20%</b>	
	29		5		6		6	
Number of farms								
Backgnd Beef sold (lb)	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Transferred out (lb)	230.61	329.95	450.89	625.00	310.98	481.05	56.47	85.92
Other income	150.07	195.65	81.63	124.96	77.73	95.77	269.61	339.25
Transferred in (lb)	0.39	-	-	-	2.02	-	-	-
Inventory change (lb)	-219.99	-287.97	-333.01	-490.42	-212.15	-269.34	-224.77	-283.50
Gross margin	-61.02	-119.96	-99.52	-177.72	-78.31	-202.11	-1.31	-3.03
	118.07		81.82		107.39		138.64	
<b>Direct Expenses</b>								
Protein Vit Minerals (lb.)	11.64	3.64	10.92	7.25	1.74	0.82	3.47	0.74
Barley (bu.)	0.44	1.04	2.06	4.31	-	-	0.09	0.26
Corn (bu.)	3.99	11.31	12.50	35.30	2.53	7.57	2.52	7.34
Corn Silage (lb.)	437.74	6.65	830.92	13.73	105.59	1.16	307.34	5.04
Hay, Grass (lb.)	323.50	7.72	689.35	20.08	332.53	7.38	126.63	2.91
Oats (bu.)	0.80	1.68	0.08	0.19	1.12	2.79	1.41	2.88
Pasture (aum)	0.10	2.02	-	-	0.10	1.86	0.15	2.48
DDGS, dry (lb.)	20.30	1.09	67.28	4.71	19.26	0.61	16.53	0.77
Cover crop forage (aum)	0.02	0.40	-	-	0.19	3.44	-	-
Other feed stuffs (lb)	173.89	4.63	91.03	1.40	59.88	2.87	108.79	2.45
Veterinary	1.12		1.49			0.78		1.24
Supplies	0.46		0.68			0.13		0.29
Fuel & oil	1.20		1.69			1.85		0.99
Repairs	3.00		3.31			6.23		1.68
Custom hire	0.61		2.15			0.93		0.39
Marketing	3.03		13.35			1.18		1.41
Operating interest	1.19		2.01			4.06		0.86
Total direct expenses	50.77		111.64			43.63		31.74
Return over direct expense	67.29		-29.81			63.76		106.90
<b>Overhead Expenses</b>								
Hired labor	1.38		0.67			2.06		0.47
Utilities	0.65		1.92			0.94		0.39
Interest	1.02		2.03			3.35		0.49
Mach & bldg depreciation	2.94		4.10			5.34		1.98
Miscellaneous	1.98		3.25			1.09		1.90
Total overhead expenses	7.97		11.97			12.78		5.23
Total dir & ovhd expenses	58.74		123.61			56.41		36.97
Net return	59.33		-41.79			50.98		101.67
Labor & management charge	4.81		8.55			6.98		4.62
Net return over lbr & mgt	54.52		-50.33			44.01		97.05
<b>Cost of Production Per Cwt. Produced</b>								
Total direct expense per unit	120.39		146.43			131.99		97.61
Total dir& ovhd expense per unit	122.49		148.68			135.28		99.21
With other revenue adjustments	122.49		148.68			135.28		99.21
With labor and management	123.75		150.29			137.07		100.63
Est. labor hours per unit	0.33		0.61			0.48		0.22
<b>Other Information</b>								
No. purchased or trans in	118		90			67		216
Number sold or trans out	154		117			94		216
Percentage death loss	0.7		0.2			0.5		0.8
Avg. daily gain (lb.)	1.66		0.98			1.48		2.18
Lb. of conc / lb. of gain	3.68		8.80			2.09		2.57
Lb. of feed / lb. of gain	9.34		19.37			6.28		5.42
Feed cost per cwt. of gain	40.18		86.96			28.49		24.87
Feed cost per head	73.63		118.48			34.71		63.01
Avg wgt / Backgnd Beef sold	716		735			654		700
Avg sales price / cwt.	143.08		138.61			154.69		152.16

**Livestock Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**State Report, 2016**  
**(Farms Sorted By Net Return)**

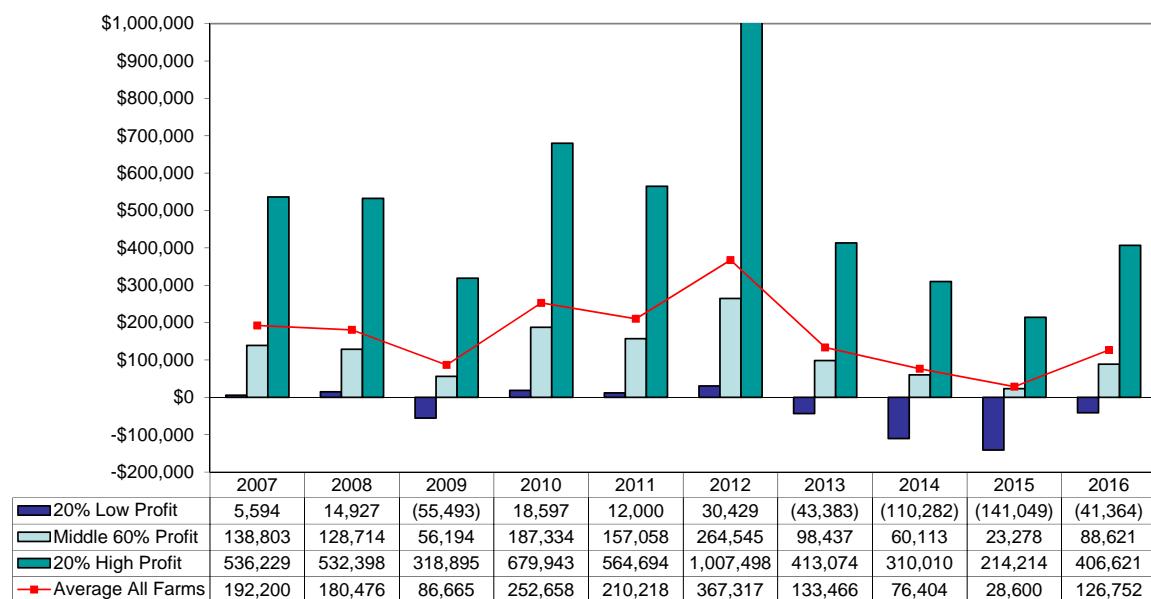
**Beef Backgrounding -- Average Per Head**

	<b>Avg. Of All Farms</b>		<b>Low 20%</b>		<b>40 - 60%</b>		<b>High 20%</b>	
	29		5		6		6	
Number of farms								
Backgnd Beef sold (lb)	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Transferred out (lb)	422.6	604.67	614.3	851.55	378.8	586.00	143.1	217.73
Other income	275.0	358.56	111.2	170.26	94.7	116.66	683.2	859.68
Transferred in (lb)	0.71	-	-	-	2.47	-	-	-
Inventory change (lb)	-403.2	-527.73	-453.7	-668.19	-258.4	-328.10	-569.6	-718.41
Gross margin	-111.8	-219.84	-135.6	-242.14	-95.4	-246.20	-3.3	-7.68
	216.37		111.48		130.82		351.32	
<b>Direct Expenses</b>								
Protein Vit Minerals (lb.)	21.3	6.67	14.9	9.88	2.1	1.00	8.8	1.88
Barley (bu.)	0.8	1.90	2.8	5.87	-	-	0.2	0.66
Corn (bu.)	7.3	20.73	17.0	48.09	3.1	9.22	6.4	18.60
Corn Silage (lb.)	802.2	12.18	1,132.1	18.70	128.6	1.41	778.8	12.76
Hay, Grass (lb.)	592.8	14.15	939.2	27.35	405.1	8.99	320.9	7.37
Oats (bu.)	1.5	3.09	0.1	0.26	1.4	3.40	3.6	7.30
Pasture (aum)	0.2	3.69	-	-	0.1	2.27	0.4	6.29
DDGS, dry (lb.)	37.2	2.00	91.7	6.42	23.5	0.74	41.9	1.95
Cover crop forage (aum)	0.0	0.73	-	-	0.2	4.19	-	-
Other feed stuffs (lb)	318.7	8.48	124.0	1.90	72.9	3.49	275.7	6.20
Veterinary	2.06		2.03			0.95		3.15
Supplies	0.84		0.92			0.15		0.73
Fuel & oil	2.21		2.30			2.25		2.52
Repairs	5.49		4.52			7.59		4.26
Custom hire	1.11		2.94			1.13		0.98
Marketing	5.55		18.19			1.43		3.58
Operating interest	2.17		2.73			4.94		2.19
Total direct expenses	93.05		152.10			53.15		80.43
Return over direct expense	123.32		-40.62			77.67		270.89
<b>Overhead Expenses</b>								
Hired labor	2.52		0.92			2.51		1.19
Utilities	1.19		2.62			1.14		0.99
Interest	1.88		2.76			4.08		1.25
Mach & bldg depreciation	5.38		5.59			6.50		5.02
Miscellaneous	3.63		4.43			1.33		4.80
Total overhead expenses	14.60		16.31			15.56		13.26
Total dir & ovhd expenses	107.65		168.42			68.72		93.69
Net return	108.72		-56.94			62.11		257.64
Labor & management charge	8.82		11.64			8.50		11.70
Net return over lbr & mgt	99.91		-68.58			53.61		245.94
<b>Cost of Production Per Cwt. Produced</b>								
Total direct expense per unit	120.39		146.43			131.99		97.61
Total dir& ovhd expense per unit	122.49		148.68			135.28		99.21
With other revenue adjustments	122.49		148.68			135.28		99.21
With labor and management	123.75		150.29			137.07		100.63
Est. labor hours per unit	0.60		0.84			0.58		0.56
<b>Other Information</b>								
No. purchased or trans in	118		90			67		216
Number sold or trans out	154		117			94		216
Percentage death loss	0.7		0.2			0.5		0.8
Avg. daily gain (lb.)	1.66		0.98			1.48		2.18
Lb. of conc / lb. of gain	3.68		8.80			2.09		2.57
Lb. of feed / lb. of gain	9.34		19.37			6.28		5.42
Feed cost per cwt. of gain	40.18		86.96			28.49		24.87
Feed cost per head	73.63		118.48			34.71		63.01
Avg wgt / Backgnd Beef sold	716		735			654		700
Avg sales price / cwt.	143.08		138.61			154.69		152.16

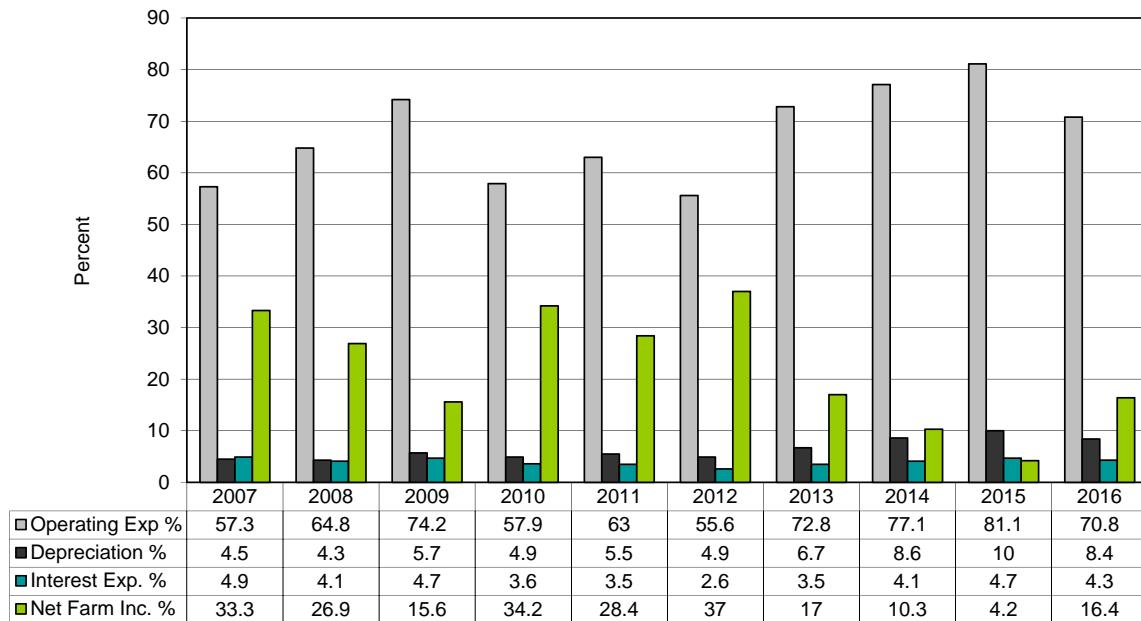
**Figure 1. Gross Cash Income Per Farm**  
 N.D. Farm Business Management Education Program



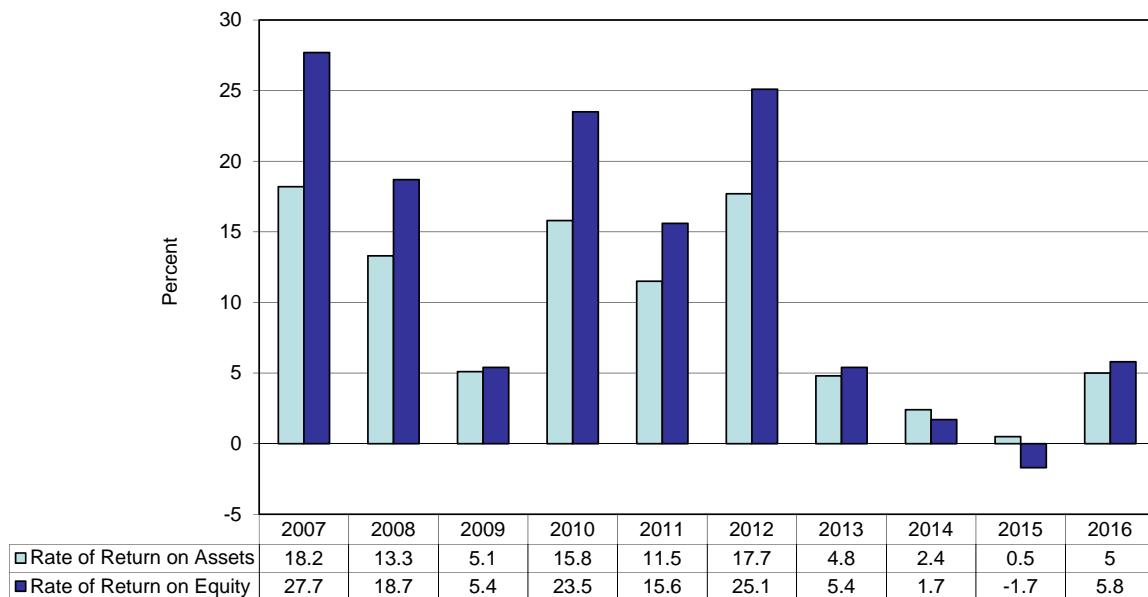
**Figure 2. Net Farm Income (Accrual) Per Farm**  
 N.D. Farm Business Management Education Program



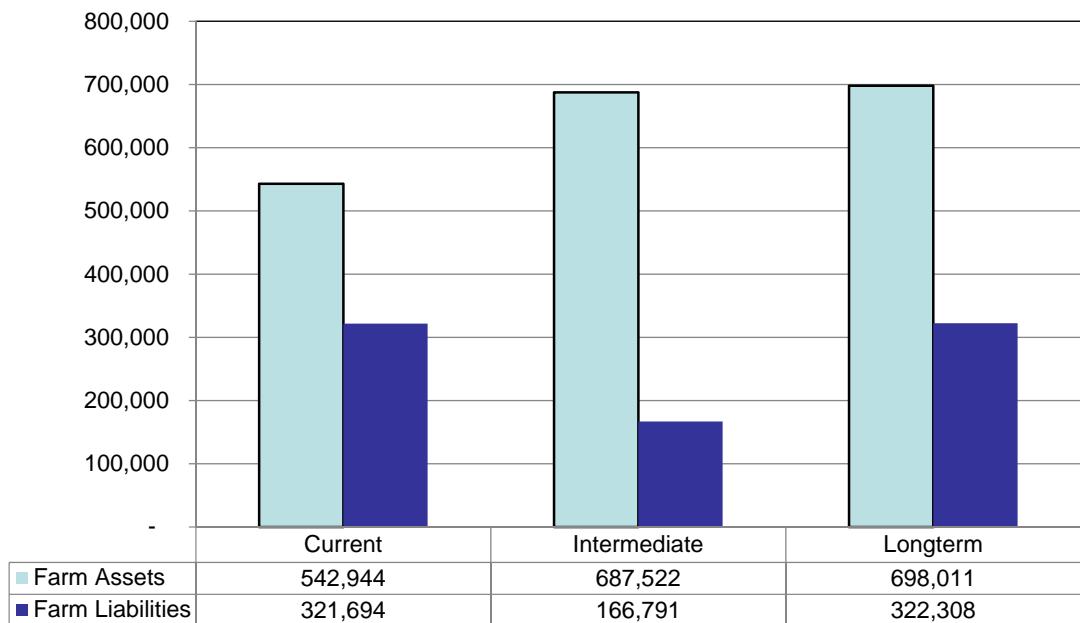
**Figure 3. Financial Efficiency Measures  
(As Percent of Gross Revenue)**  
N.D. Farm Business Management Education Program



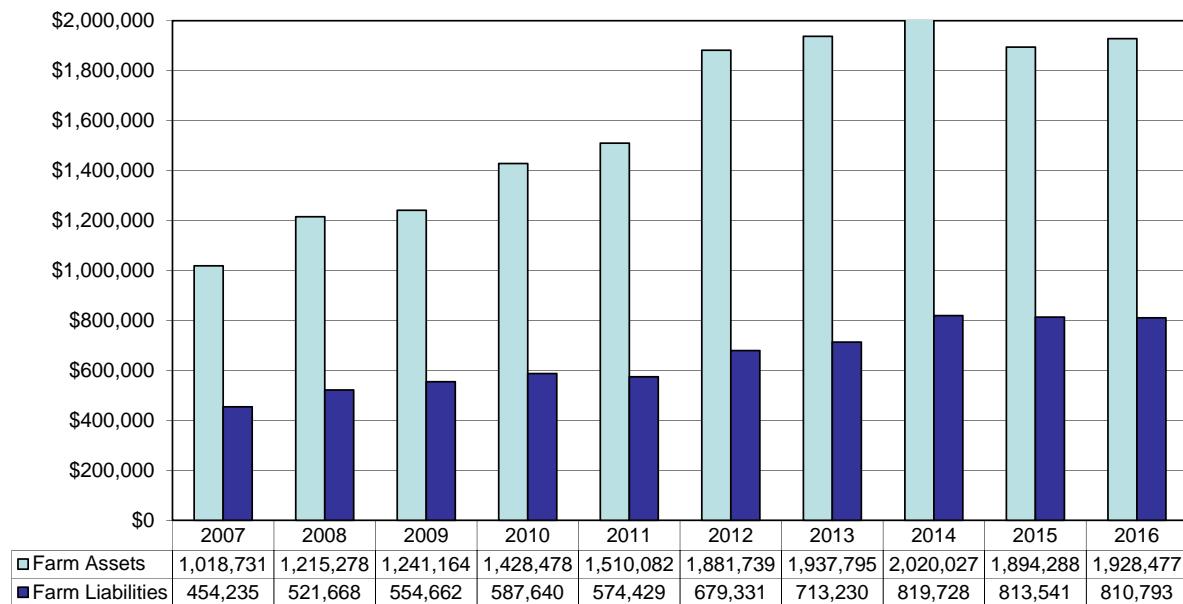
**Figure 4. Profitability Measures Per Farm**  
N.D. Farm Business Management Education Program



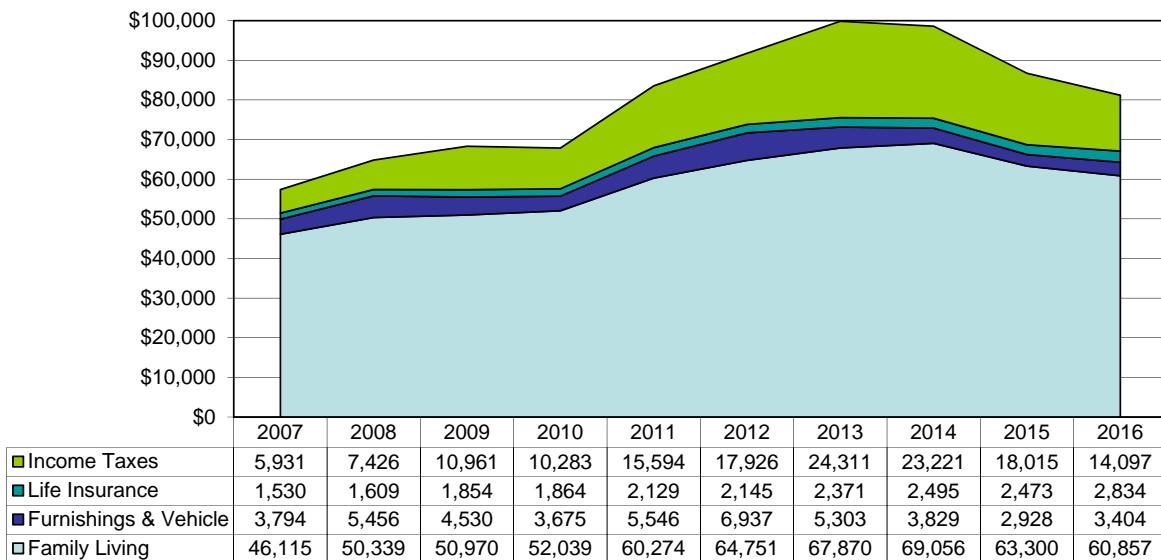
**Figure 5. Assets and Liabilities Per Farm, 2016**  
 N.D. Farm Business Management Education Program



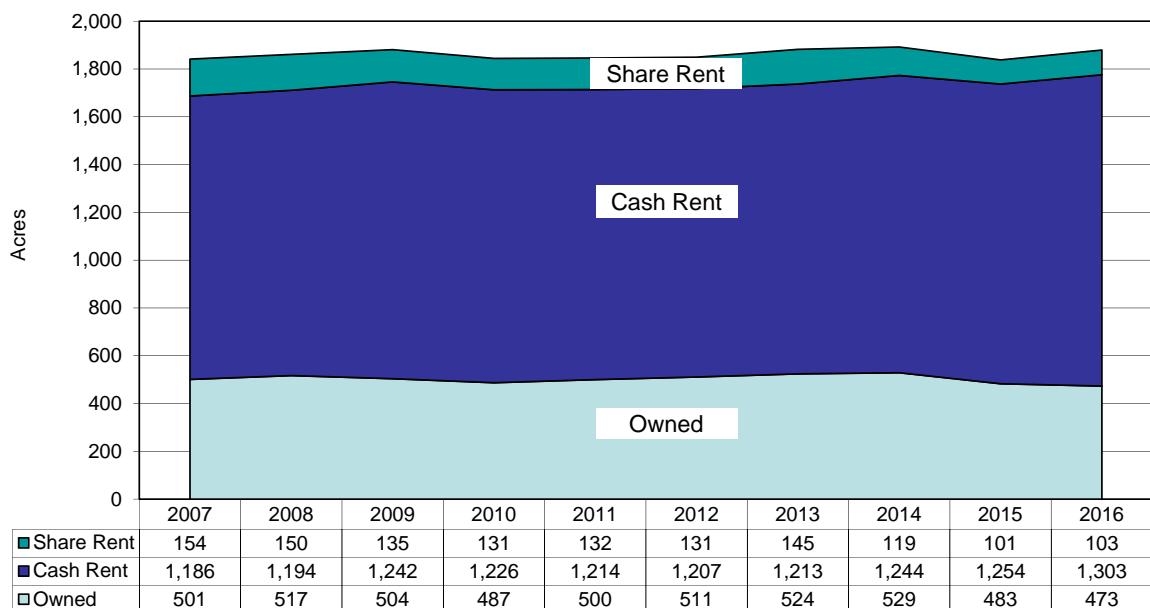
**Figure 6. Total Farm Assets and Liabilities**  
 N.D. Farm Business Management Education Program



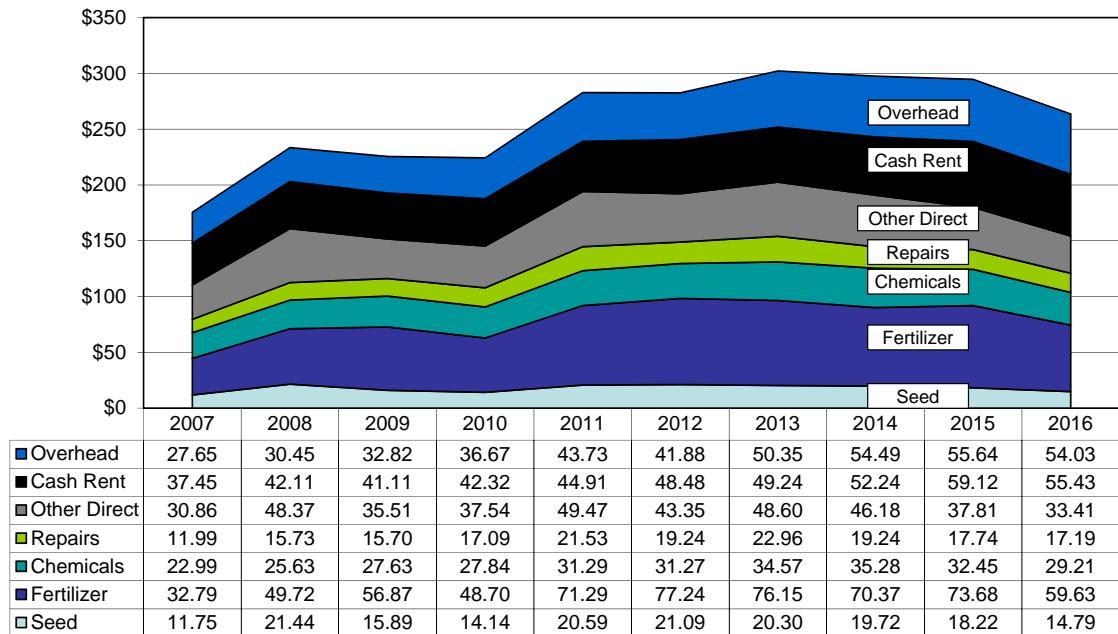
**Figure 7. Household and Personal Expenses**  
 N.D. Farm Business Management Education Program



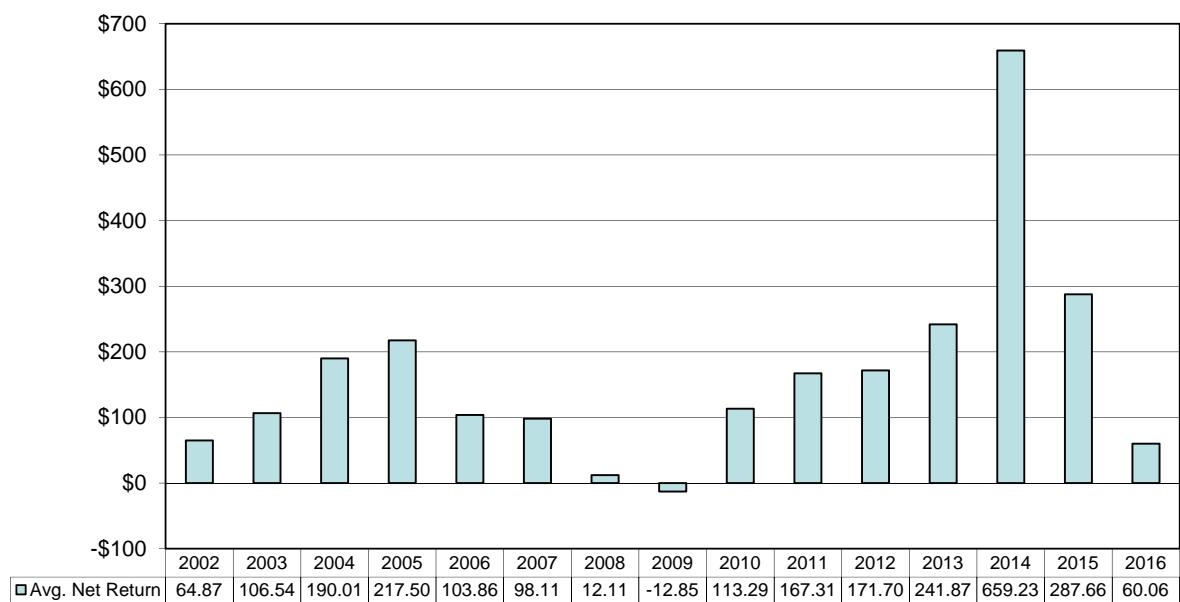
**Figure 8. Crop Acreage Per Farm**  
 N.D. Farm Business Management Education Program

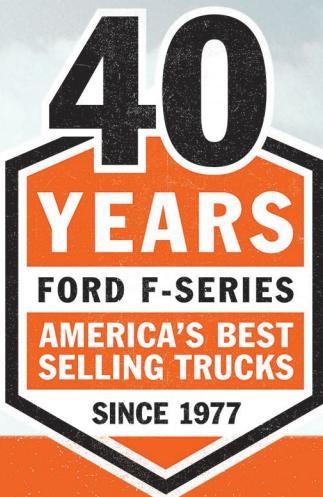


**Figure 9. Spring Wheat Costs Per Acre**  
 N.D. Farm Business Management Education Program



**Figure 10. Average Net Return Per Beef Cow**  
 N.D. Farm Business Management Education Program





# FOUR DECADES OF DOMINANCE

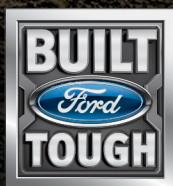


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