# Red River Valley Farm Financial Performance Farm Programs

Agricultural Lenders Conference *East* Presentation via Zoom October 20,2020

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## **Red River Valley Results**

Main Source of Information

North Dakota and Minnesota Farm Business Management Education Programs

#### **FFSC Recommended Financial Measures**

#### Liquidity

- 1. Current Ratio
- 2. Working Capital
- 3. Working Capital/Gross Revenue Ratio

#### Solvency

- 4. Debt/Asset Ratio
- 5. Equity/Asset Ratio
- 6. Debt/Equity Ratio

#### Profitability

- 7. Rate of Return on Farm Assets
- 8. Rate of Return on Farm Equity
- 9. Operating Profit Margin Ratio
- 10. Net Farm Income
- 11. EBITDA

#### **Repayment Capacity**

- 12. Capital Debt Repayment Capacity
- 13. Capital Debt Repayment Margin
- 14. Replacement Margin
- 15. Term Debt and Capital Lease Coverage Ratio
- 16. Replacement Margin Coverage Ratio

#### **Financial Efficiency**

- 17. Asset Turnover Ratio
- 18. Operating Expense Ratio
- 19. Depreciation/Amortization Expense Ratio
- 20. Interest Expense Ratio
- 21. Net Farm Income from Operations Ratio

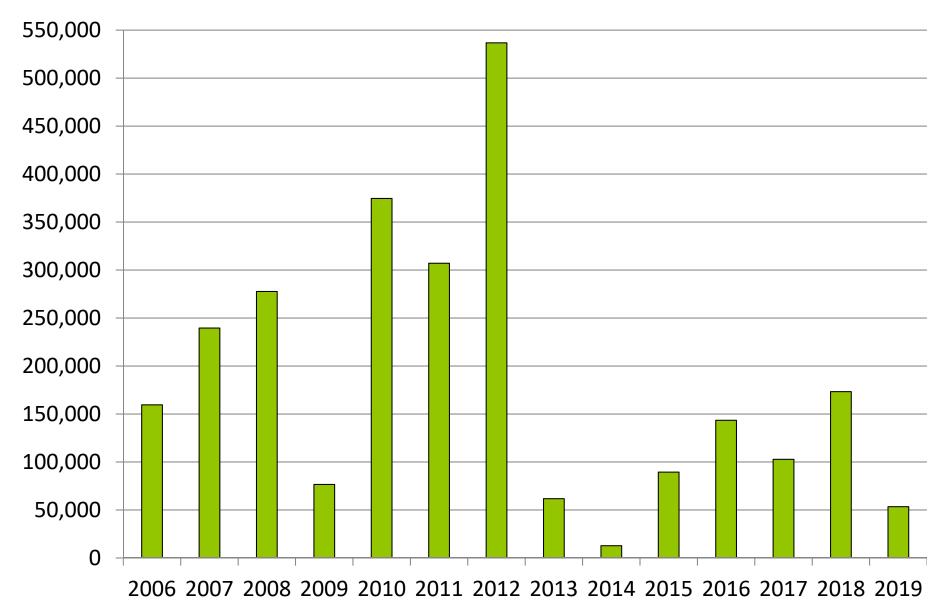
# Net Farm Income

Cash Income

- Cash Expense
- ± Inventory Change
- Depreciation
- ± Gain/Loss on Capital Sales

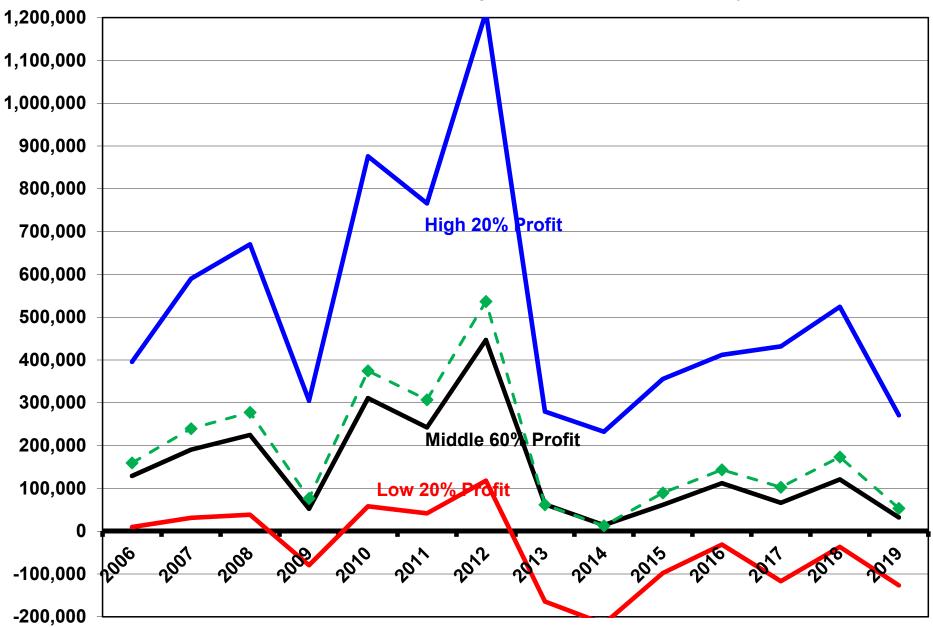
## Net Farm Income

MN-ND Farm Business Management, Red River Valley



#### Average Net Farm Income Red River Valley, 2006-2019

MN-ND Farm Business Management, Red River Valley



# Which NFI Best Describes the Typical Red River Valley Producer?

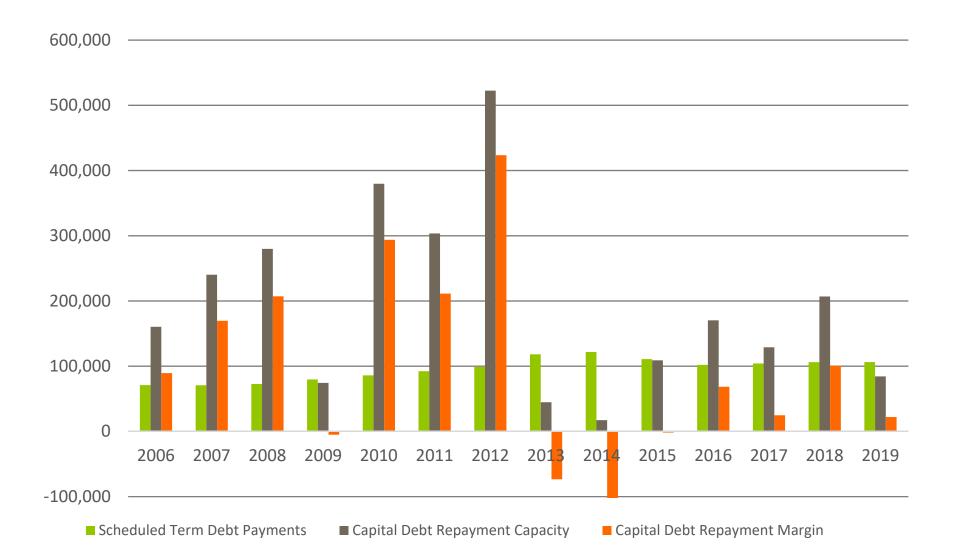
	All Farms		Avg after removing the	High 20%	Low 20%
Year	Average	Median	high and low 20%	Profit	Profit
2010	374,642	289,594	310,951	875,947	58 <i>,</i> 079
2011	307,053	226,111	242,510	766,032	41,702
2012	536,722	425,176	446,761	1,212,181	118,136
2013	61,749	61,939	62,884	279,501	-164,215
2014	12,723	11,596	14,243	232,417	-216,307
2015	89,489	49,382	61,506	355,681	-97,775
2016	143,489	104,932	112,201	411,989	-31,147
2017	102,783	53,694	66,312	431,827	-116,848
2018	173,375	111,008	120,995	524,352	-36,524
2019	53,472	32,530	32,153	271,005	-126,535

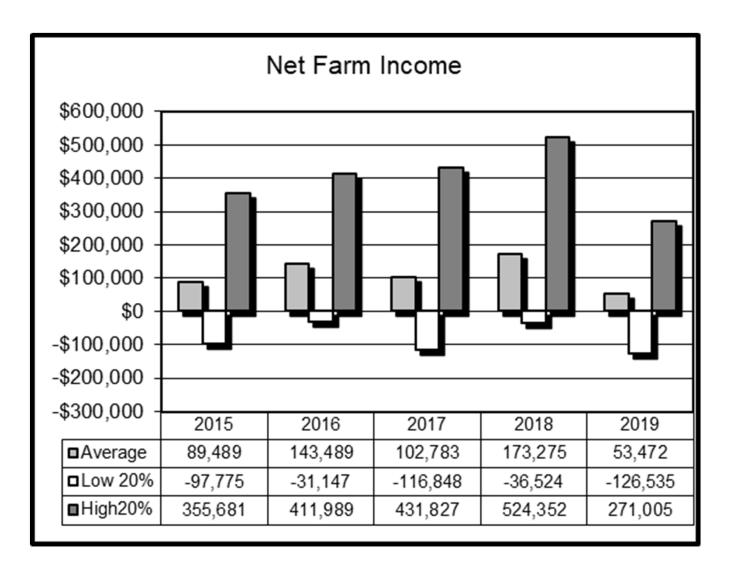
# Farms Sorted By Gross Farm Income, 2019

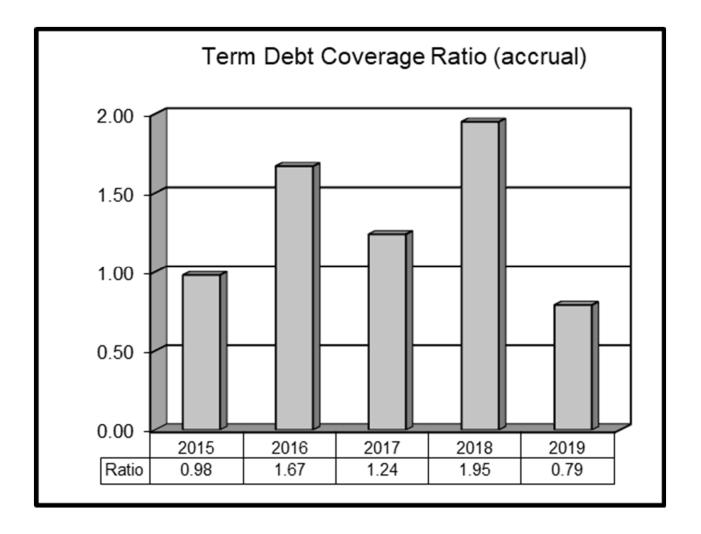
	100,001- 250,000	250,001- 500,000	500,001- 1,000,000	1,000,001- 2,000,000	Over 2,000,000
Number of Farms	25	44	66	56	23
Total Crop Acres	511	854	1,479	2,831	5,099
Average Net Farm Income	\$ 44,280	\$ 28,805	\$ 64,589	\$ 36,673	\$126,864
Current Ratio	1.46	1.67	1.45	1.41	1.25
Farm Debt to Asset Ratio (cost)	58%	43%	45%	44%	50%
Term Debt Coverage Ratio	1.86	0.70	1.02	0.57	0.84

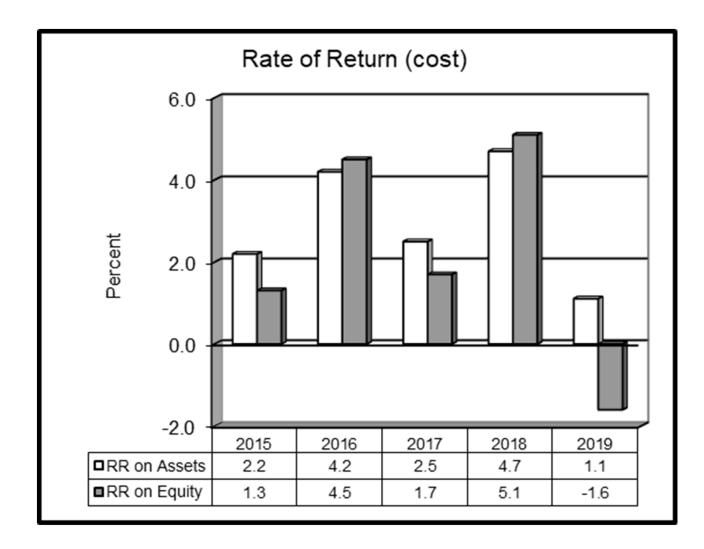
## Repayment Capacity, per Farm, 2006-2019

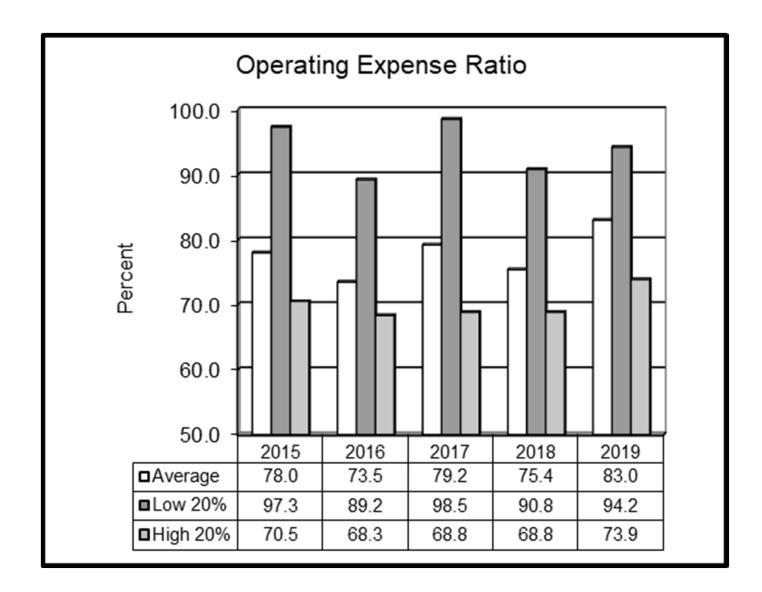
MN-ND Farm Business Management, Red River Valley







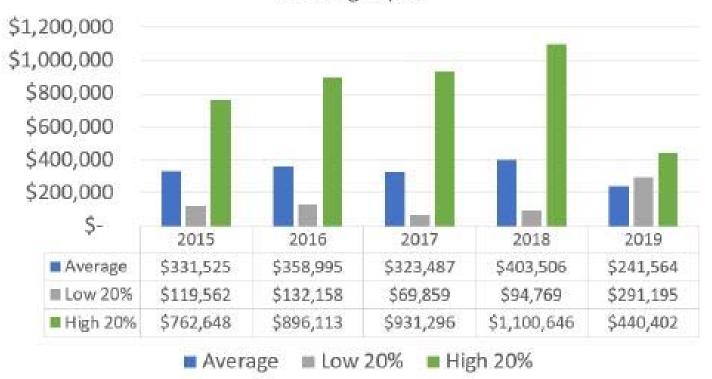






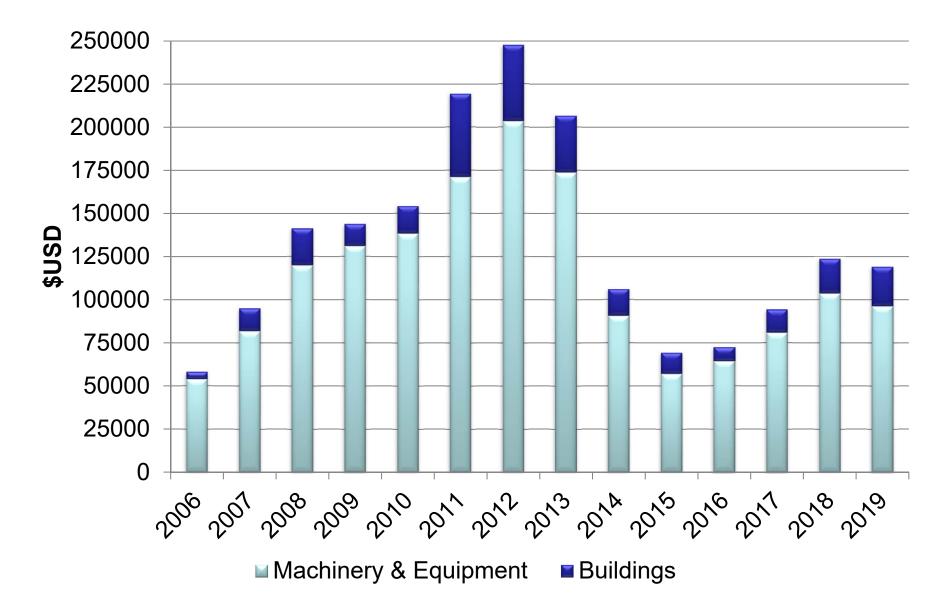
Capital Debt Repayment Capacity

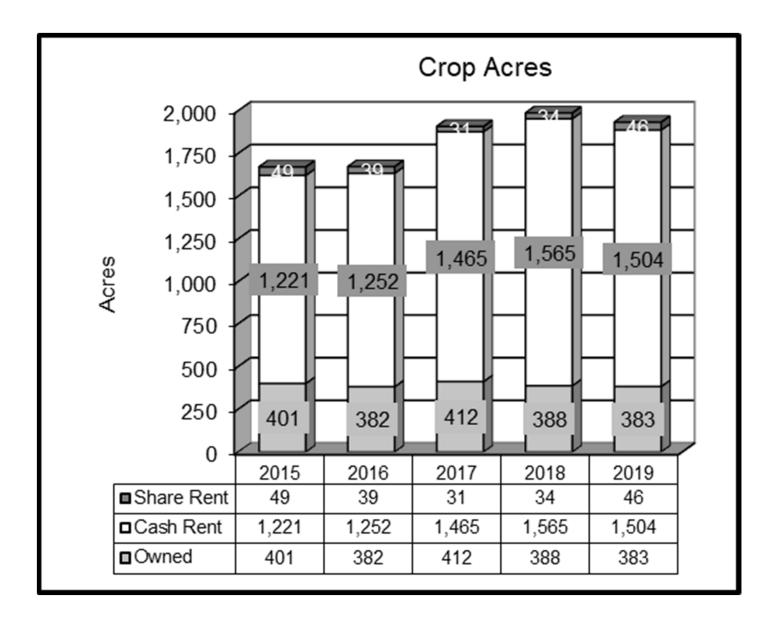
Average Low 20% High 20%

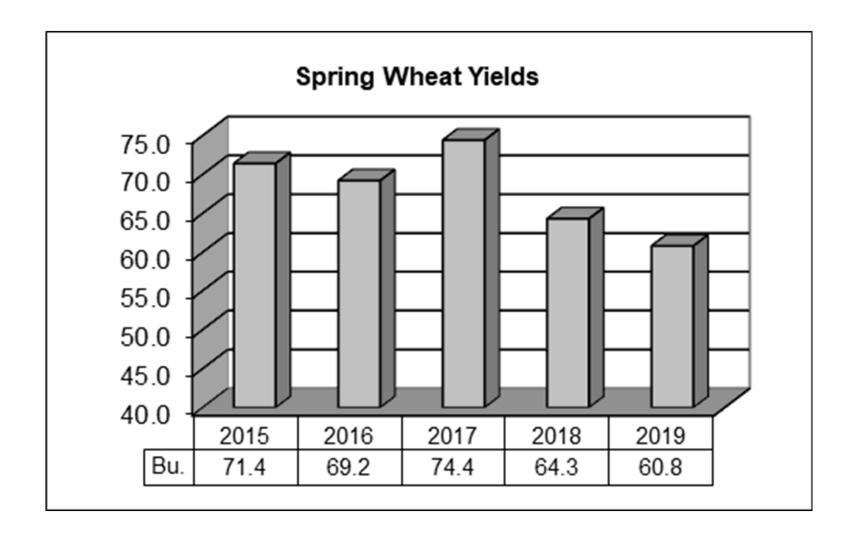


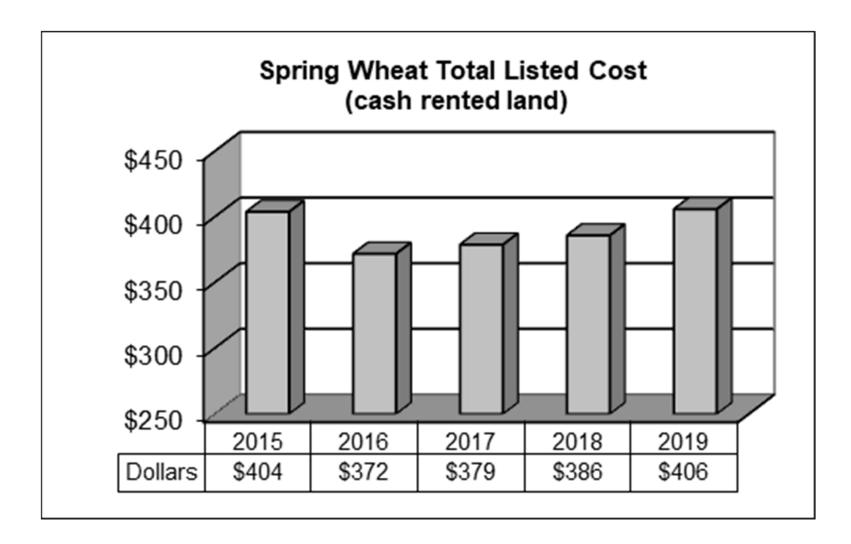
#### Working Capital

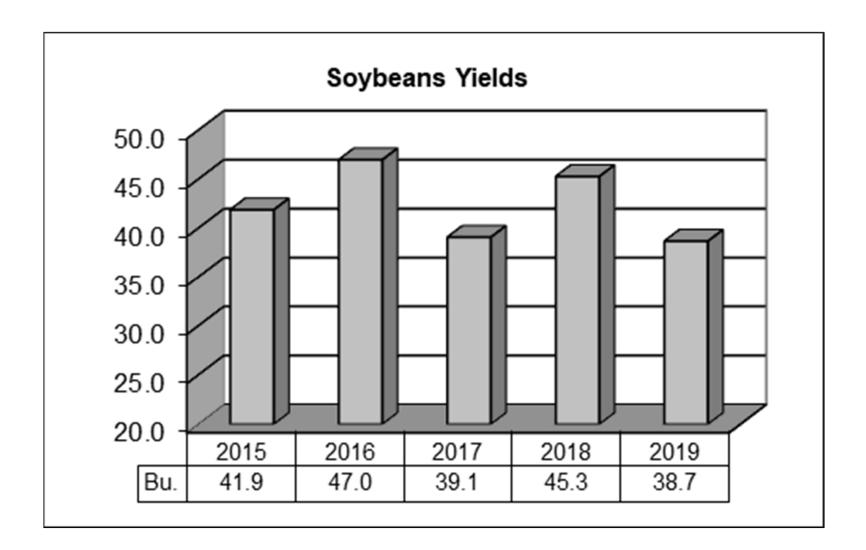
Purchases of Machinery, Equipment, and Buildings, per Farm MN-ND Farm Business Mgmt, Red River Valley

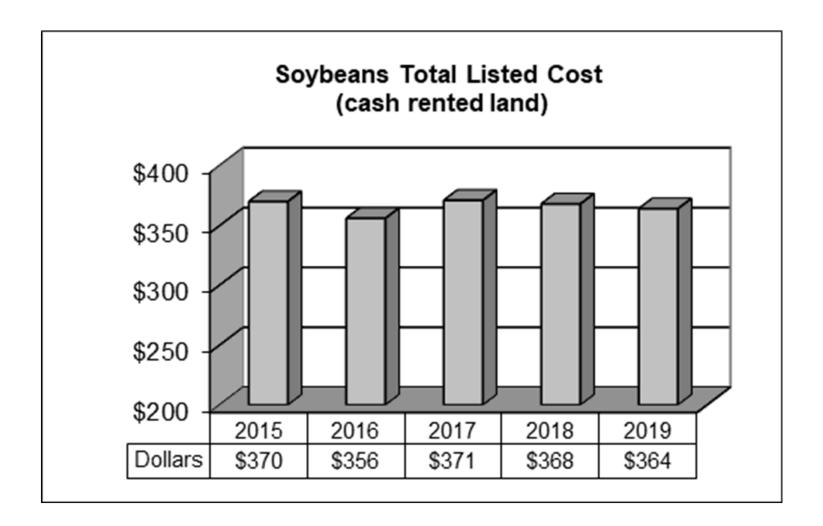


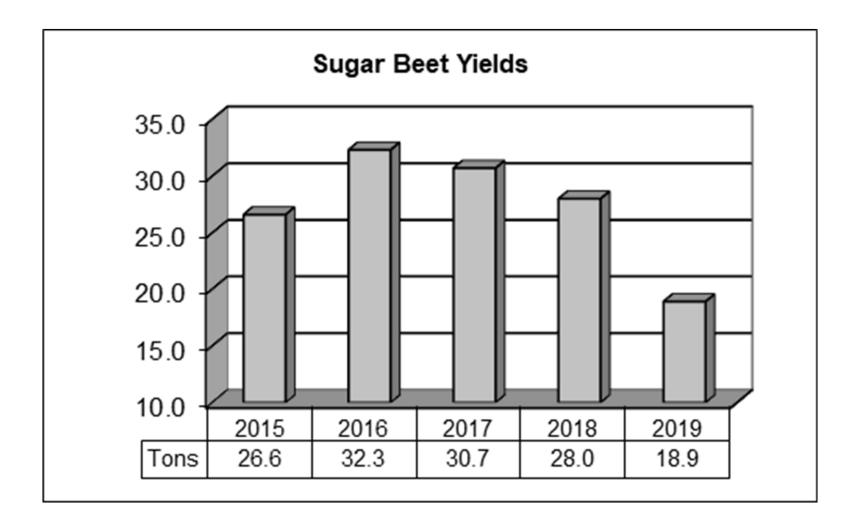


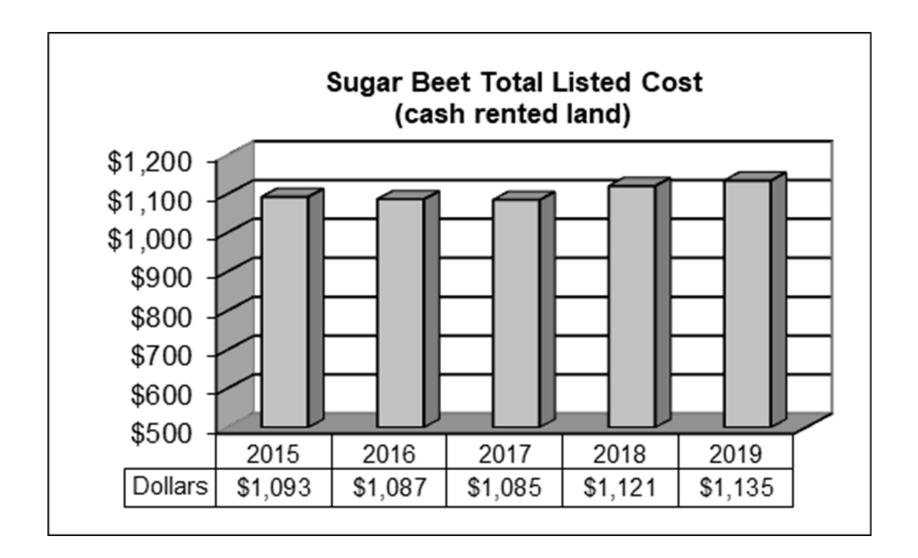






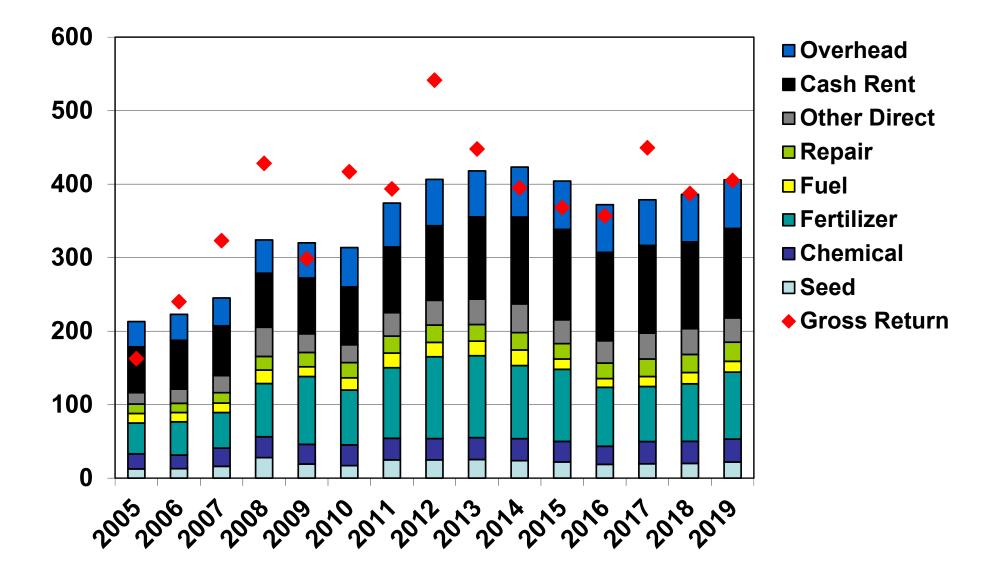






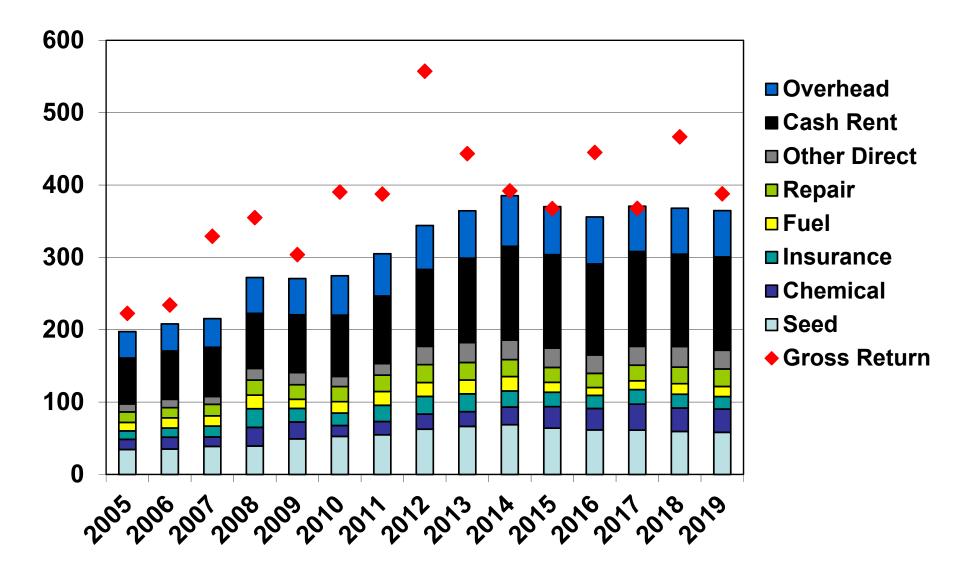
# Spring Wheat Costs per Acre

Red River Valley, MN and ND Farm Management Education, 2005-2019



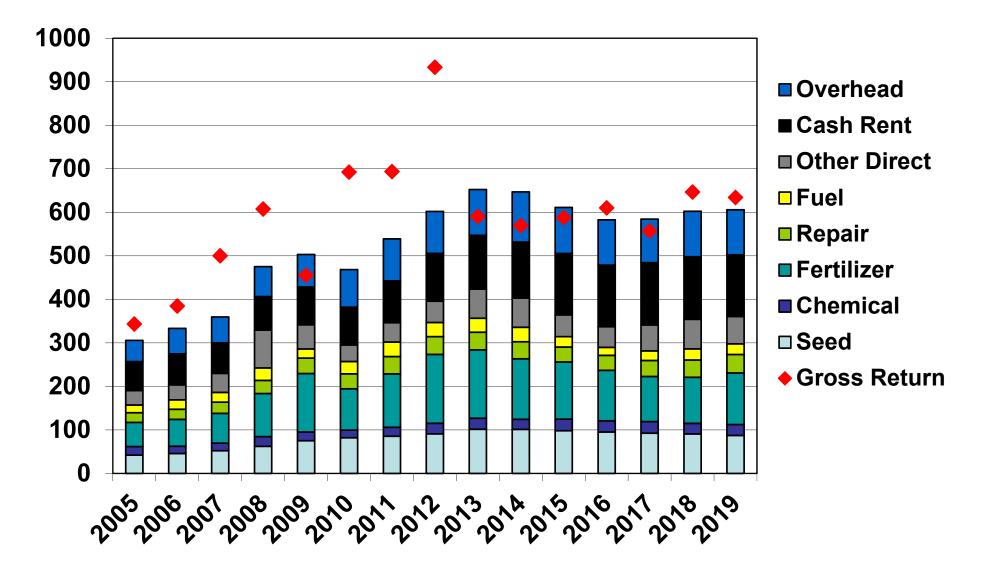
## Soybean Costs per Acre

Red River Valley, MN and ND Farm Management Education, 2005-2019



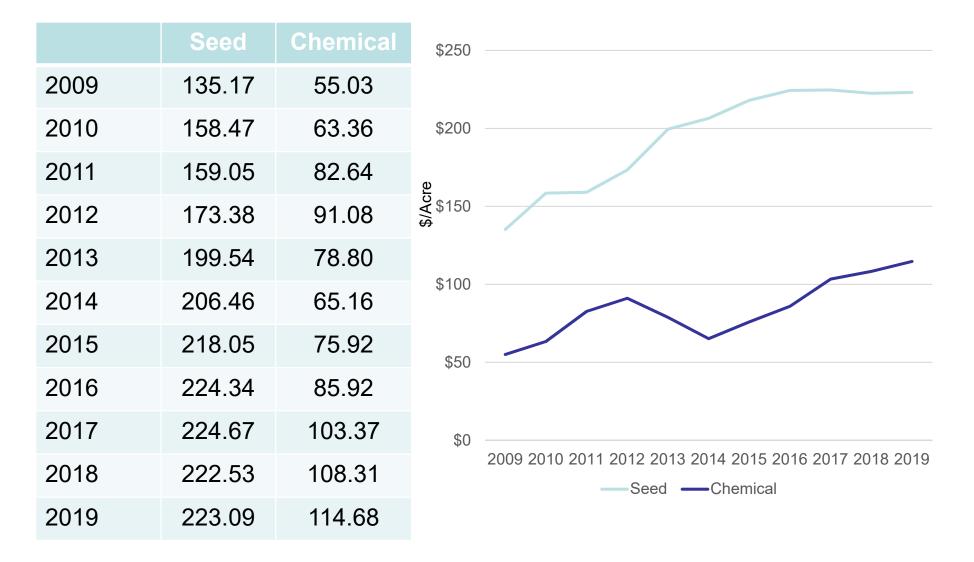
# Corn Costs per Acre

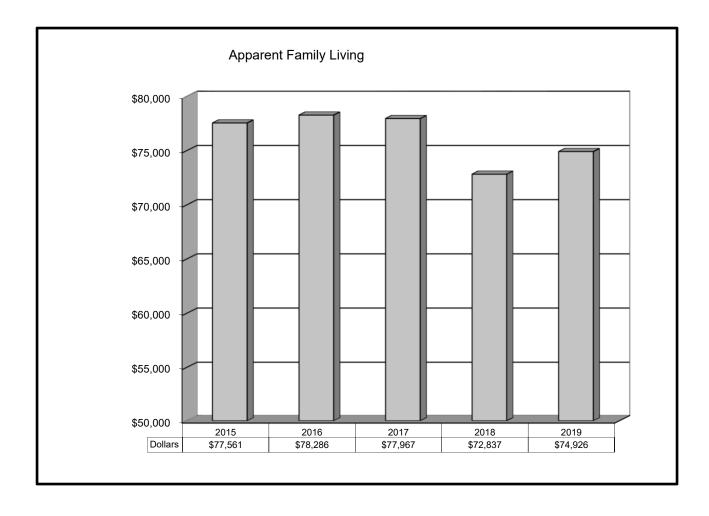
Red River Valley, MN and ND Farm Management Education, 2005-2019



# Seed and Chemical Cost Per Acre

MN-ND Red River Valley Farm Business Mgmt Sugar Beet Enterprise Analysis, 2009-2019, on Cash Rented Land and Stock Joint Venture





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#### **Government Payments**

2019 represented a net increase of \$31,959 from 2018. This is due largely in part by an additional round of Market Facilitation Program Payments.

2012	\$22,152
2013	\$32,384
2014	\$17,082
2015	\$33,835
2016	\$35,575
2017	\$22,590
2018	\$56,808
2019	\$88,767

# **Government Farm Programs**

# Recap of 2020 farm payments

CFAP 1: payments made May 26, 2020 – Sept 11, 2020 (\$16 B projected, \$10 B paid)

CFAP 2: payments made Sept. 21 – Dec. 11, 2020 (\$13.2 B projected) 2018 Farm Bill Program ARC/PLC: payments made in early Oct. for 2019/2020 crop marketing year

# PLC payments for 2019/2020

Сгор	Marketing Year	2019/2020 MYA	PLC Payment Rate
Wheat	June 1, 2019- May 31, 2020	\$4.58	\$0.92
Corn	Sept. 1, 2019 - Aug. 31, 2020	\$3.56	\$0.14
Grain Sorghum	Sept. 1, 2019 - Aug. 31, 2020	\$3.34	\$0.61
Soybeans	Sept. 1, 2019 - Aug. 31, 2020	\$8.57	\$0.00

#### PLC payment = PLC Payment Rate

- \* Established Farm Level Yield with FSA
- \* 85% of base acres for that crop
- \* 5.9% budget sequestration

# ARC payments for 2019/2020

Сгор	Marketing Year	2019/2020 MYA
Wheat	June 1, 2019- May 31, 2020	\$4.58
Corn	Sept. 1, 2019 - Aug. 31, 2020	\$3.56
Grain Sorghum	Sept. 1, 2019 - Aug. 31, 2020	\$3.34
Soybeans	Sept. 1, 2019 - Aug. 31, 2020	\$8.57

ARC payment = Guaranteed Revenue – Actual Revenue

= (86% of 5-year Olympic Avg. MYA Price and County-level Yield) - (2019/2020 MYA \* 2019 County Yield)

# Coronavirus Food and Assistance Program (CFAP 2.0)

## **CFAP Payments for Price Trigger Row Crops**

Payments for eligible row crops included in the price trigger payment category will be equal to the greater of:

Eligible acres of the crop multiplied by a rate of \$15 per acre; **OR** 

Eligible acres of the crop multiplied by a nationwide crop marketing percentage, multiplied by a crop-specific payment rate, and then by the producer's weighted 2020 Actual Production History (APH) approved yield.

If the APH is not available, 85 percent of the weighted 2019 Agriculture Risk Coverage-County Option (ARC-CO) benchmark yield for that crop will be used.

Commodity	Unit of Measure	Crop Marketing Percentage (%)	Payment Rate (\$/Unit)
Barley	Bushel	63	\$0.54
Corn	Bushel	40	\$0.58
Cotton, Upland	Pound	46	\$0.08
Sorghum	Bushel	55	\$0.56
Soybeans	Bushel	54	\$0.58
Sunflowers	Pound	44	\$0.02
Wheat (All Classes)	Bushel	73	\$0.54

#### **CFAP Payments for Flat-Rate Row Crops**

Payments for eligible row crops included in the flatrate payment category will be equal to eligible acres of the crop multiplied by a rate of \$15 per acre. Eligible acres include the producer's share of the determined acres, or reported acres if determined acres are not present, excluding prevented planted and experimental acres.

Row crops eligible for CFAP 2 in the flat-rate payment category include: alfalfa, amaranth grain, buckwheat, canola, Extra Long Staple (ELS) cotton, crambe (colewort), einkorn, emmer, flax, guar, hemp, indigo, industrial rice, kenaf, khorasan, millet, mustard, oats, peanuts, quinoa, rapeseed, rice, sweet rice, wild rice, rye, safflower, sesame, speltz, sugar beets, sugarcane, teff, and triticale.

# CFAP 2 Payments for Sales Specialty Crops (fruits and vegetables including dry beans)

The amount of the producer's eligible sales in calendar year 2019, multiplied by The payment rate for that range.

2019 Sales Range	Percent Payment Factor for the Producer's 2019 Sales of Eligible Commodities Falling in the Range
\$0 to \$49,999	10.6%
\$50,000 to \$99,999	9.9%
\$100,000 to \$499,999	9.7%
\$500,000 to \$999,999	9.0%
Sales over \$1 million	8.8%

## **CFAP 2 Payments for Livestock**

For beef cattle, hogs and pigs, and lambs and sheep, payments will be equal to the highest owned inventory of eligible livestock, excluding breeding stock, on a date selected by the eligible producer from April 16, 2020, through August 31, 2020, multiplied by the CCC payment rate.

# **CFAP 2 Livestock**

Payment Rates:

Beef Cattle \$55 per head

Hogs/Pigs \$23 per head

Sheep/Lambs \$27 per head

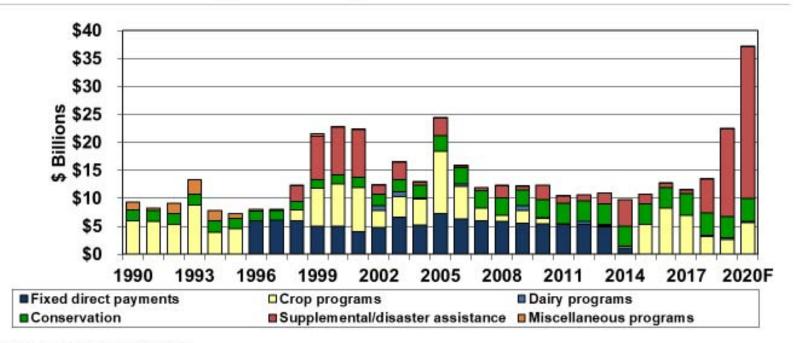
# CFAP 2 Dairy

Payments for cow milk will be equal to the sum of the following:

1. The producer's total actual milk production from April 1, 2020, to August 31, 2020, multiplied by the payment \$1.20 per hundredweight; and

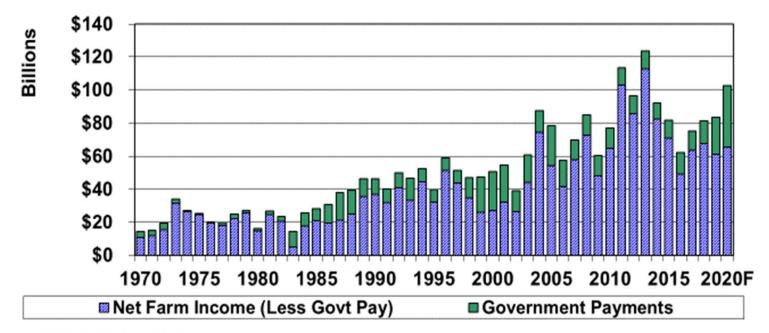
2. The producer's estimated milk production from September 1, 2020, to December 31, 2020, based on the daily average production from April 1, 2020, through August 31, 2020, multiplied by 122, multiplied by a payment rate of \$1.20 per hundredweight.

#### **U.S. Farm Program Payments**



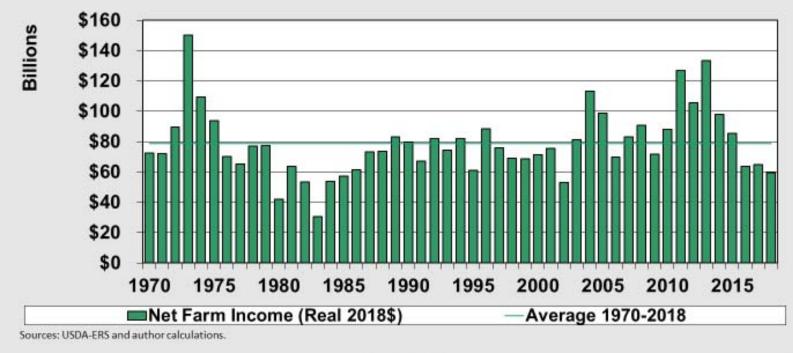
Sources: USDA-ERS and author calculations.

#### **U.S. Net Farm Income**



Sources: USDA-ERS and author calculations.

## U.S. Net Farm Income



ND5U Extension

# Thank you, Any Questions?



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