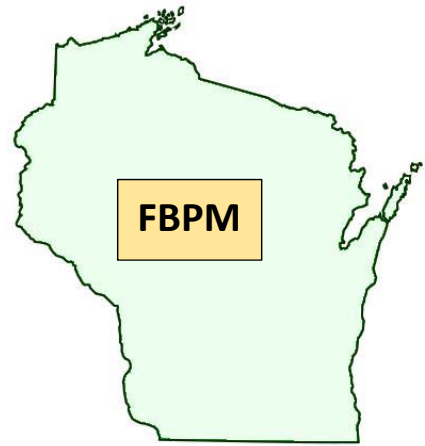
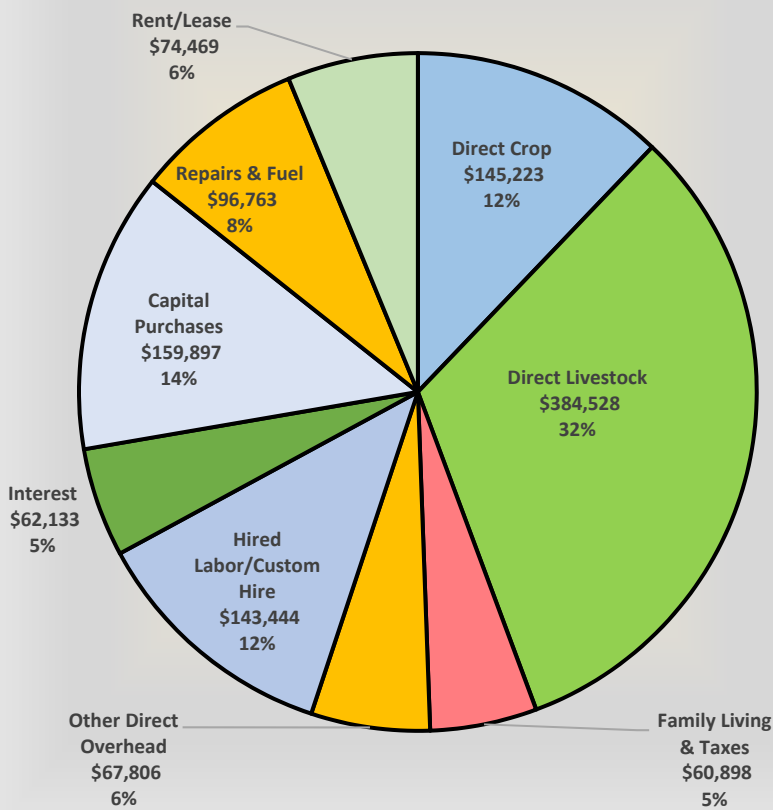


# Highlights from the 2020 WI FBPM Annual Farm Financial Report

July 2021



## Average Money Spent By Each Farm in 2020 \$1,195,161



124 farms completed an educational farm financial analysis with a Farm Business and Production Management (FBPM) instructor at their respected technical college.

Data is collected by an FBPM instructor and FBPM student, and is accrual adjusted for what took place in 2020. Nine Wisconsin instructors submitted data. All data is housed at the University of Minnesota's, Center for Farm Financial Management, and can be publicly accessed at <https://finbin.umn.edu/>.

Not all farms that are enrolled in a FBPM class completed a farm financial analysis, and not all instructors are full-time FBPM instructors.

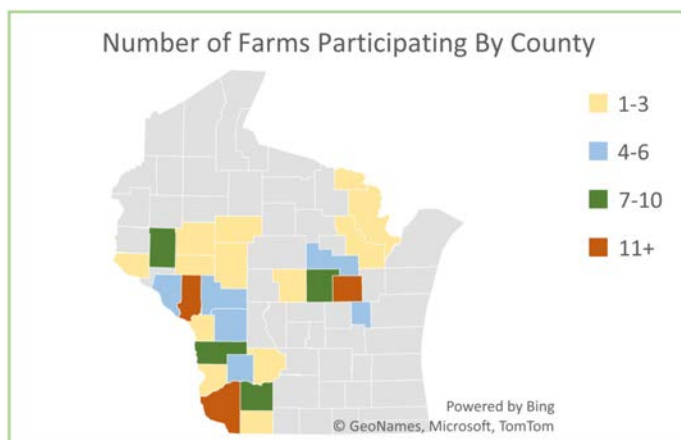
WI FBPM farms saw its highest level of farm profitability since 2014. Average net farm income was \$192,022 with the median net farm income of \$78,762.

The average farm spent \$1,195,161 in 2020. Most of the money spent, was spent at local businesses, demonstrating the vital importance of successful farms in our rural communities.

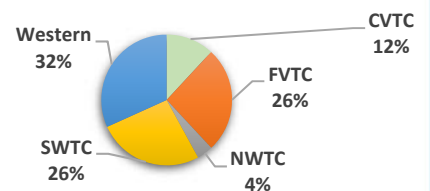
30 of the 124 farms identified with implementing an environmental field practice on their operation (cover crops, no-till, or strip till). This is the first year that farms that have implemented an environmental practice were identified. A whole farm summary and comparison can be found on page 3. In future years, the goal is to have enterprise data available for those that implemented an environmental practice.

This data holds powerful information for the student and our community. More farm data could be entered if financial resources, support, and collaboration occurred.

## Number of Farms Participating By County



## Technical Colleges Submitting 2020 Data



# Overview of the 2020 WI FBPM Data

## Financial Summary-Farms Sorted by Number of Years Farming

	10 or Less	11 - 20	21 - 30	31 - 40	Over 40	All Farms
Number of farms	26	15	31	28	24	124
<b>Income Statement</b>						
Gross cash farm income	\$ 319,206	\$ 853,032	\$1,434,525	\$ 910,296	\$2,154,795	\$ 1,151,359
Total cash farm expense	\$ 279,219	\$ 740,098	\$1,194,633	\$ 758,362	\$1,889,905	\$ 983,763
Net cash farm income	\$ 39,987	\$ 112,934	\$ 239,892	\$ 151,934	\$ 264,890	\$ 167,595
Inventory change	\$ 30,060	\$ 66,382	\$ 94,989	\$ 87,420	\$ 191,812	\$ 94,945
Depreciation	\$ (20,320)	\$ (67,298)	\$ (95,358)	\$ (73,571)	\$ (98,545)	\$ (71,927)
Net farm income from operations	\$ 49,727	\$ 112,019	\$ 239,522	\$ 165,783	\$ 358,156	\$ 190,613
Gain or loss on capital sales	\$ 2,538	\$ 1,816	\$ (343)	\$ 7,323	\$ (4,706)	\$ 1,409
<b>Average net farm income</b>	<b>\$ 52,265</b>	<b>\$ 113,835</b>	<b>\$ 239,179</b>	<b>\$ 173,107</b>	<b>\$ 353,450</b>	<b>\$ 192,022</b>
<b>Median net farm income</b>	<b>\$ 16,215</b>	<b>\$ 32,834</b>	<b>\$ 84,867</b>	<b>\$ 126,893</b>	<b>\$ 114,402</b>	<b>\$ 78,762</b>
<b>Profitability (cost)</b>						
Rate of return on assets	4.0%	4.4%	7.5%	6.9%	9.4%	7.4%
Rate of return on equity	5.2%	4.2%	12.2%	8.8%	17.1%	11.6%
Operating profit margin	9.5%	14.3%	20.9%	17.9%	21.6%	19.2%
Asset turnover rate	41.6%	30.8%	36.1%	38.4%	43.8%	38.7%
<b>Profitability (market)</b>						
Rate of return on assets	4.4%	4.7%	6.1%	1.7%	7.3%	5.4%
Rate of return on equity	5.6%	5.6%	8.9%	0.4%	10.2%	6.8%
Operating profit margin	15.1%	18.7%	22.3%	6.7%	23.5%	19.0%
Asset turnover rate	29.4%	25.1%	27.4%	25.9%	31.1%	28.1%
<b>Liquidity &amp; Repayment (end of year)</b>						
Current assets	\$ 136,458	\$ 389,792	\$ 553,408	\$ 410,597	\$ 851,514	\$ 471,641
Current liabilities	\$ 88,748	\$ 176,578	\$ 293,368	\$ 175,783	\$ 388,925	\$ 228,279
Current ratio	1.54	2.21	1.89	2.34	2.19	2.07
Working capital	\$ 47,710	\$ 213,214	\$ 260,040	\$ 234,814	\$ 462,589	\$ 243,362
Change in working capital	\$ 35,857	\$ 192,073	\$ 151,323	\$ 165,090	\$ 225,774	\$ 149,560
Working capital to gross inc	14.0%	24.3%	17.4%	24.6%	20.3%	20.2%
Term debt coverage ratio	1.68	1.43	2.32	2.21	1.61	1.89
Replacement coverage ratio	1.45	1.32	1.91	1.73	1.44	1.61
Term debt to EBITDA	3.99	4.76	3.59	2.48	3.48	3.46
<b>Solvency (end of year at market)</b>						
Total assets	\$ 1,148,832	\$2,946,389	\$4,475,631	\$ 3,383,839	\$5,709,821	\$ 3,585,429
Total liabilities	\$ 563,309	\$1,646,373	\$2,132,818	\$ 1,338,597	\$2,740,511	\$ 1,683,161
Net worth	\$ 585,523	\$1,300,017	\$2,342,813	\$ 2,045,242	\$2,969,310	\$ 1,902,268
Total net worth change	\$ 67,979	\$ 121,522	\$ 247,746	\$ 61,642	\$ 360,856	\$ 174,652
Farm debt to asset ratio	49%	58%	49%	42%	49%	49%
Total debt to asset ratio	49%	56%	48%	40%	48%	47%
Change in total net worth %	13%	10%	12%	3%	14%	10%
<b>Nonfarm Information</b>						
Net nonfarm income	\$ 27,145	\$ 28,514	\$ 32,225	\$ 13,399	\$ 13,245	\$ 22,786
<b>Crop Acres</b>						
Total crop acres	299	497	540	538	744	523
Total crop acres owned	73	162	244	179	315	198
Total crop acres cash rented	225	336	295	359	429	326
Machinery value per crop acre	\$ 501	\$ 1,023	\$ 1,238	\$ 1,101	\$ 1,219	\$ 1,088

## Traditional Farming Practices Verses Implemented Environmental Practices-Year 1

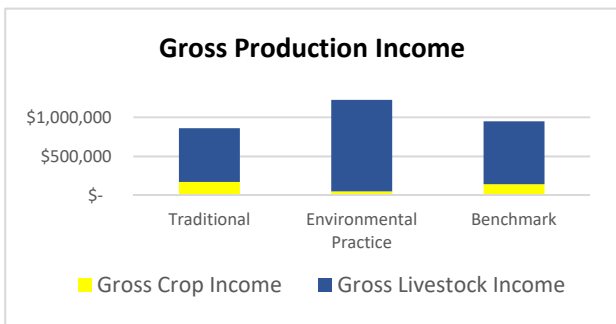
The chart on the right shows the financial information from 94 farms that identified with traditional farming practices, and 30 farms have implemented an environmental farming practice like, cover crops, no till, or strip-till. The far-right column is the combination or benchmark data from the 2020 analysis. This is the first year of collecting this kind of data.

When looking at the data the majority of the environmental practice group's income came from livestock production (dairy, beef, hogs or poultry).

A few items that stand out: the environmental practice farms age of the producer was a few years older than the traditional group, had a higher owner equity percentage, and a stronger current ratio. Overall, operating expense ratio was higher with the environmental group, yet they showed a higher net farm income.

The environmental group had significantly higher seed, fertilizer, chemical and fuel cost per acre, but also had more pre-paid expenses. Which may explain the higher costs. Prepaid adjustments can be made on an enterprise analysis, but not able to be broken down on a whole farm level.

This preliminary one-year data gives a broad financial overview of farms that have implemented farming practices that have been deemed environmental farming practices compared to traditional farming practices and overall benchmark data. Long term trends are yet to be identified.



	Traditional	Environmental Practice	Benchmark
# of Farms	94	30	124
<b>Liquidity</b>			
Current Ratio	1.95	2.39	2.07
Working Capital to Gross Revenue %	19.5%	22.5%	20.2%
<b>Solvency (market)</b>			
Farm Debt to Asset	51%	43%	49%
Farm Equity to Asset	49%	57%	51%
<b>Profitability (market)</b>			
Rate of Return on Assets	5.1%	5.9%	5.4%
Rate of Return on Equity	6.6%	7.3%	6.8%
Asset turnover rate	26.7%	32.2%	28.1%
Operating Profit Margin	19.3%	18.4%	19.0%
<b>Repayment Capacity</b>			
Term Debt Coverage Ratio	1.71	2.56	1.89
Replacement Coverage Ratio	1.48	2.11	1.61
<b>Efficiency</b>			
Asset Turnover (cost)	38.8%	38.3%	38.7%
Operating Expense Ratio	72.7%	73.9%	73.0%
Depreciation Expense Ratio	6.8%	4.0%	6.0%
Interest Expense Ratio	5.7%	4.1%	5.2%
Net Farm Income Ratio	14.8%	18.0%	15.8%
<b>Other Farm Information</b>			
Total Crop Acres	560	409	523
Total Pasture Acres	25	59	33
Machinery Value Per Acre	\$ 1,036	\$ 1,313	\$ 1,088
Average Farm Assets	\$ 3,203,363	\$ 3,547,972	\$ 3,286,736
Average Farm Equity	\$ 1,551,227	\$ 2,005,729	\$ 1,661,187
Value of Farm Production	\$ 855,407	\$ 1,141,444	\$ 924,610
Average Net Farm Income	\$ 165,831	\$ 274,089	\$ 192,022
Median Net Farm Income	\$ 76,267	\$ 100,825	\$ 78,762
Average Age of the Operators	46.3	48.7	46.9
Average No. of Years Farming	22.9	25.9	23.7
<b>Other notable crop expenses/acre</b>			
Seed/Acre	\$ 95.99	\$ 127.40	\$ 102.02
Fertilizer/Acre	\$ 105.62	\$ 169.12	\$ 117.73
Chemical/Acre	\$ 26.08	\$ 47.15	\$ 30.09
Fuel/Oil/Acre	\$ 46.00	\$ 74.34	\$ 51.40
Change in Prepaid \$ from previous year/Acre	\$ (26.95)	\$ (151.43)	\$ (50.23)
<b>Sum/Ac</b>	<b>\$ 246.74</b>	<b>\$ 266.58</b>	<b>\$ 251.01</b>
<b>Income breakdown</b>			
Gross Crop Income	\$ 170,412	\$ 50,404	\$ 142,346
Gross Livestock Income	\$ 688,787	\$ 1,171,803	\$ 805,646

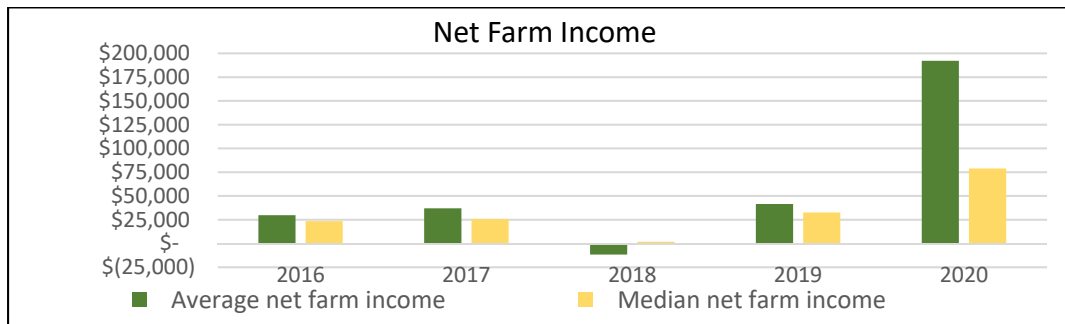
### General Producer Summary from 2020

- Average farm assets \$3,585,429, average farm liability of \$1,683,161--giving the farm producer 53% owner equity.
- Average age of the producer was 46.9 years and has been farming for 23.7 years
- Family living withdrawals were \$51,504.
- Non-farm income (off farm income) was \$22,380.
- Producers owned 38% of the crop acres they ran. Average crop acres farmed was 523.
- Producers had a 5.4% rate of return on their assets and a 6.8% rate of return on equity (market).
- The farms showed a significant increase in their working capital. Their ending current ratio increased to 2.07 up from 1.36 at the beginning of 2020. These levels have not been seen since 2014.
- Machinery value per crop acre farmed was \$1,088
- Average hourly hired labor wage was \$16.91.

## How Net Farm Income is used.

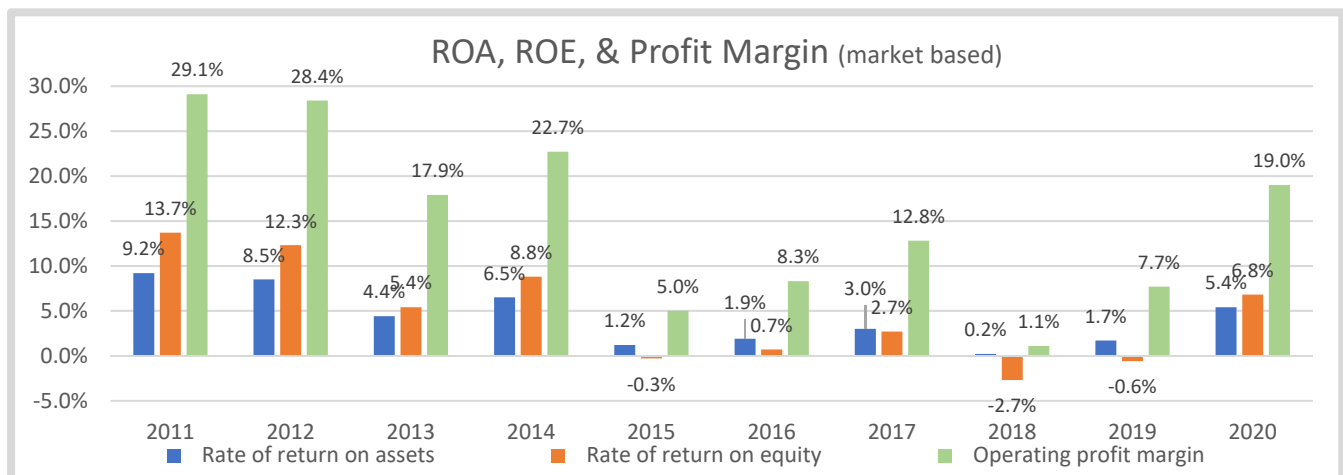
Net Farm Income, is the profit from the farm. Those profits are used to make principle loan payments and pay family living. If the amount is negative, it indicates there is a need for other revenue sources. If no other revenue sources are available, most times the balance goes on an operating line of credit. If the balance after making term principle payments and family living is positive, the remaining amount is used to paydown operating lines of credit or other debt, reinvest, or save. In 2020 there was a positive balance, and many were able to pay down past debt and build working capital. Most farms rely on off-farm income as an additional revenue source. In 2020 farms had an average of \$22,380 in off-farm income.

		2016	2017	2018	2019	2020
<b>Net Farm Income</b>		\$ 29,626	\$ 36,892	\$ (11,750)	\$ 41,537	\$ 192,022
Depreciation	(plus)	\$ 48,827	\$ 72,954	\$ 78,403	\$ 76,841	\$ 71,927
Family Living	(minus)	\$ 45,827	\$ 49,130	\$ 54,964	\$ 49,158	\$ 51,504
Scheduled Principle Payments	(minus)	\$ 51,089	\$ 61,102	\$ 75,822	\$ 98,011	\$ 84,690
<b>Balance</b>		\$ (18,463)	\$ (386)	\$ (64,133)	\$ (28,791)	\$ 127,755



## Return on Investment

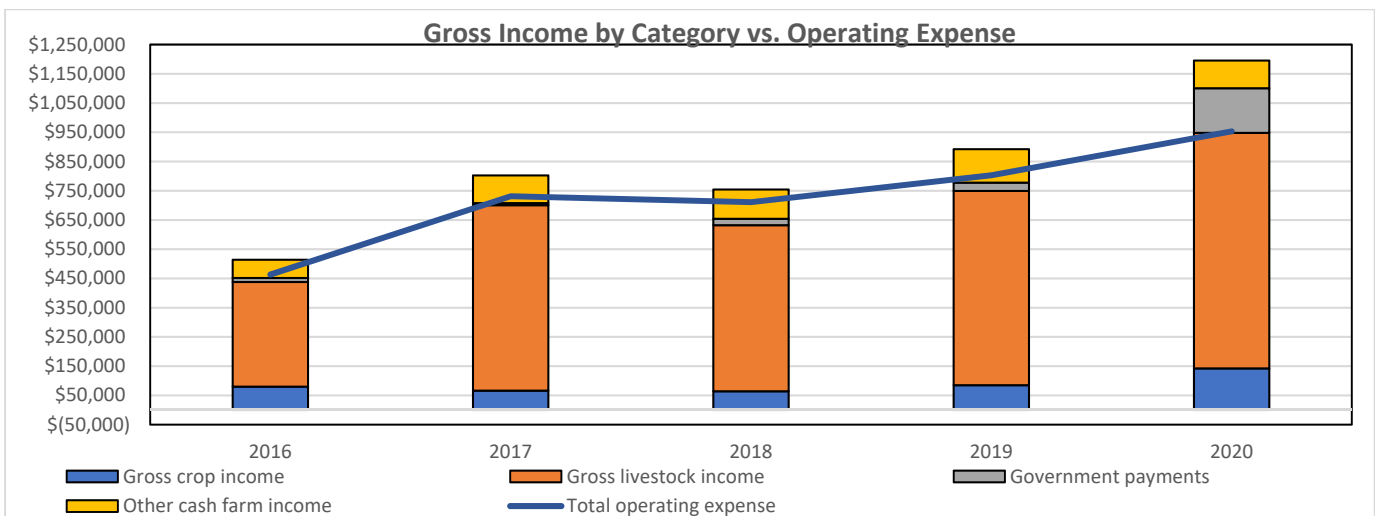
Rate of Return on Assets (ROA) can be thought of as the average interest rate being earned on all of the farm investments. Farms should be earning a rate equal to or more than they are paying at the bank for interest. Rate of Return on Equity (ROE) represents the interest rate being earned by the equity investment in the farm. This return can be compared to returns invested somewhere else, like the stock market. Operating profit margin, shows the efficiency of the business. A low profit margin can be caused by low product prices, high operating expenses or inefficient production.



## Farm Income Statement

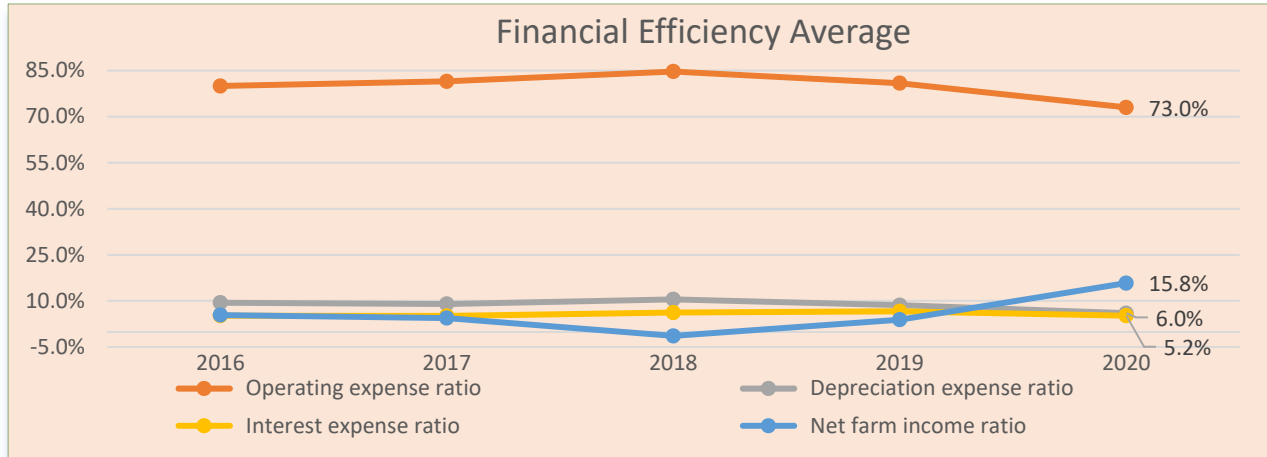
In 2020 there was a significant increase in government payments primarily due to COVID-19, which contributed to a positive net farm income.

Summary Farm Income Statement (sorted by years)					
	2016	2017	2018	2019	2020
Number of farms	123	111	85	111	124
<b>Farm Revenue</b>					
Crop sales	\$ 68,571	\$ 65,421	\$ 66,341	\$ 83,771	\$ 117,618
Crop inventory change	\$ 11,259	\$ 977	\$ (2,019)	\$ 1,126	\$ 24,728
Gross crop income	\$ 79,830	\$ 66,398	\$ 64,322	\$ 84,897	\$ 142,346
Livestock sales	\$ 355,345	\$ 628,970	\$ 566,374	\$ 664,279	\$ 786,582
Livestock inventory change	\$ 2,764	\$ 5,316	\$ 1,477	\$ 156	\$ 19,064
Gross livestock income	\$ 358,109	\$ 634,286	\$ 567,851	\$ 664,435	\$ 805,646
Government payments	\$ 13,699	\$ 7,300	\$ 21,857	\$ 28,706	\$ 152,820
Other cash farm income	\$ 62,335	\$ 94,582	\$ 100,401	\$ 114,248	\$ 94,340
Other accrual changes	\$ 4,660	\$ 5,163	\$ (7,854)	\$ 4,954	\$ 11,434
<b>Gross farm income</b>	<b>\$518,631</b>	<b>\$807,730</b>	<b>\$746,579</b>	<b>\$897,240</b>	<b>\$1,206,585</b>
<b>Farm Expense</b>					
Cash operating expenses	\$ 400,625	\$ 655,384	\$ 615,170	\$ 732,345	\$ 921,630
Inventory Changes	\$ 14,069	\$ 2,851	\$ 17,527	\$ (6,095)	\$ (40,370)
Depreciation	\$ 48,827	\$ 72,954	\$ 78,403	\$ 76,841	\$ 71,927
<b>Total operating expense</b>	<b>\$463,521</b>	<b>\$731,189</b>	<b>\$711,101</b>	<b>\$803,091</b>	<b>\$953,187</b>
Interest paid	\$ 26,114	\$ 41,339	\$ 45,904	\$ 58,966	\$ 62,133
Change in accrued interest	\$ 812	\$ (329)	\$ 246	\$ 125	\$ 651
Total interest expense	\$ 26,926	\$ 41,009	\$ 46,150	\$ 59,091	\$ 62,784
<b>Total expenses</b>	<b>\$490,446</b>	<b>\$772,199</b>	<b>\$757,251</b>	<b>\$862,182</b>	<b>\$1,015,971</b>
Net farm income from operations	\$ 28,185	\$ 35,531	\$ (10,672)	\$ 35,058	\$ 190,613
Gain or loss on capital sales	\$ 1,442	\$ 1,360	\$ (1,077)	\$ 6,479	\$ 1,409
<b>Net farm income</b>	<b>\$ 29,626</b>	<b>\$ 36,892</b>	<b>\$ (11,750)</b>	<b>\$ 41,537</b>	<b>\$ 192,022</b>

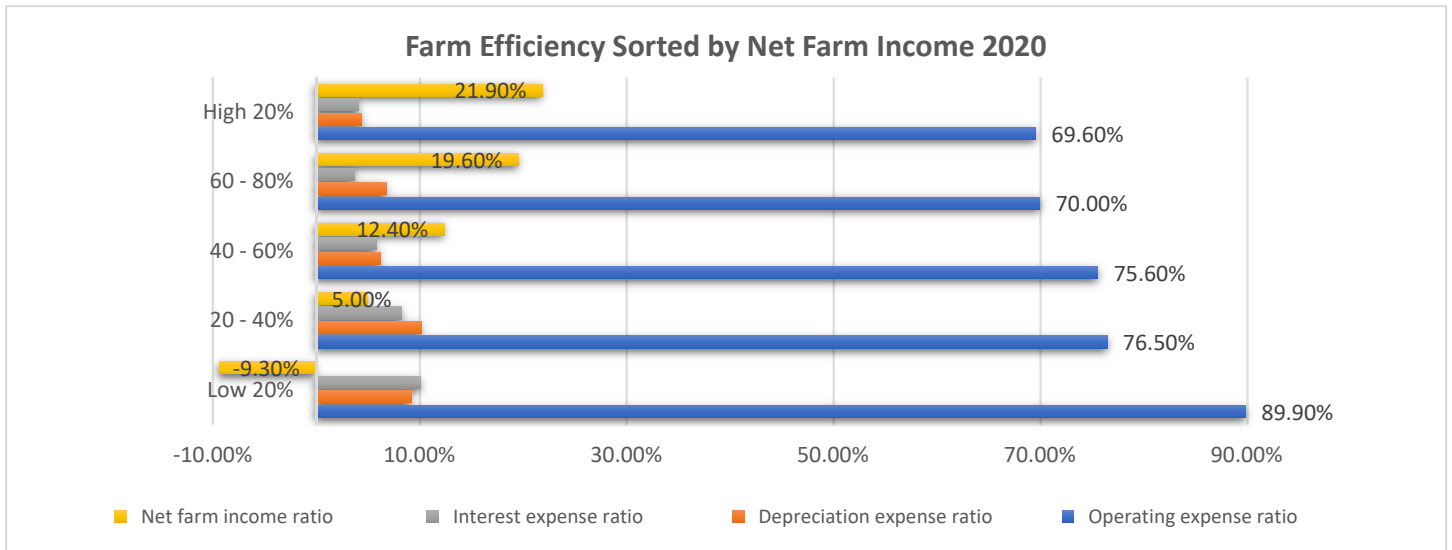


## Financial Efficiency

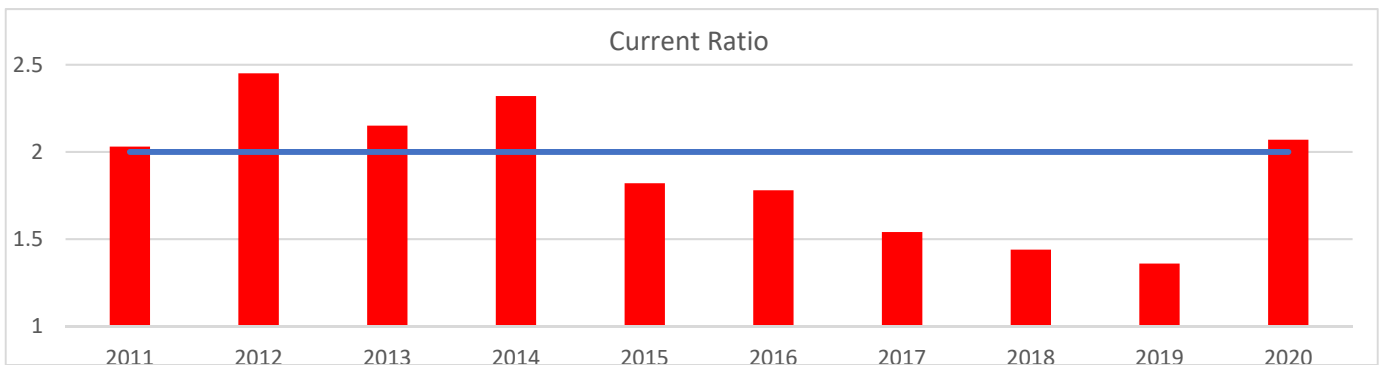
If you add up the operating expense ratio, interest expense ratio, depreciation expense ratio, and net farm income, you will get 100 or \$1.00. In 2020, for every \$1 in income, \$.73 went to pay operating expenses \$0.06 went to pay interest, \$.05 went for depreciation, and \$0.15 was net farm income. With an increase in revenue, primarily from government payments, Wisconsin farms saw a drop in their operating expense ratio. From 2016 to 2019 the average operating expense ratio was over 80%. In an ideal situation the operating expense ratio should be less than 70%.



Farms that had a lower operating expense ratio saw a higher net farm income.

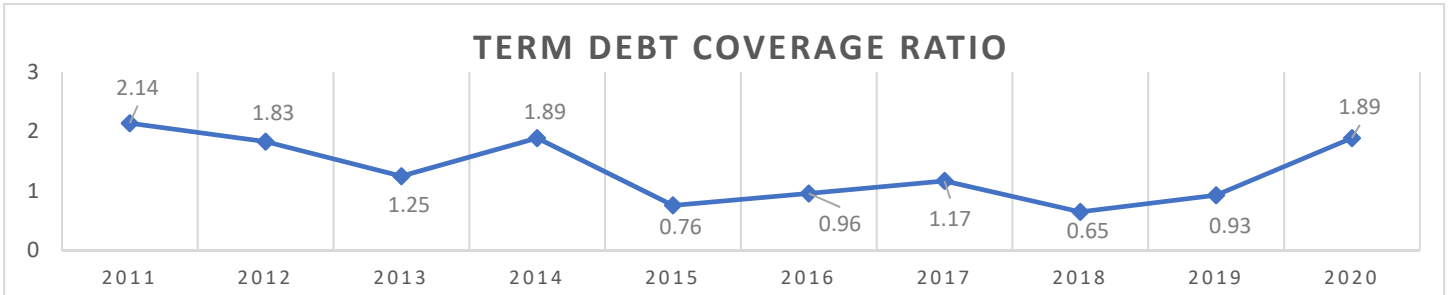


A healthy current ratio is considered to be higher than 2.0. For the first time since 2014, Wisconsin farms saw higher than a 2.0 current ratio.



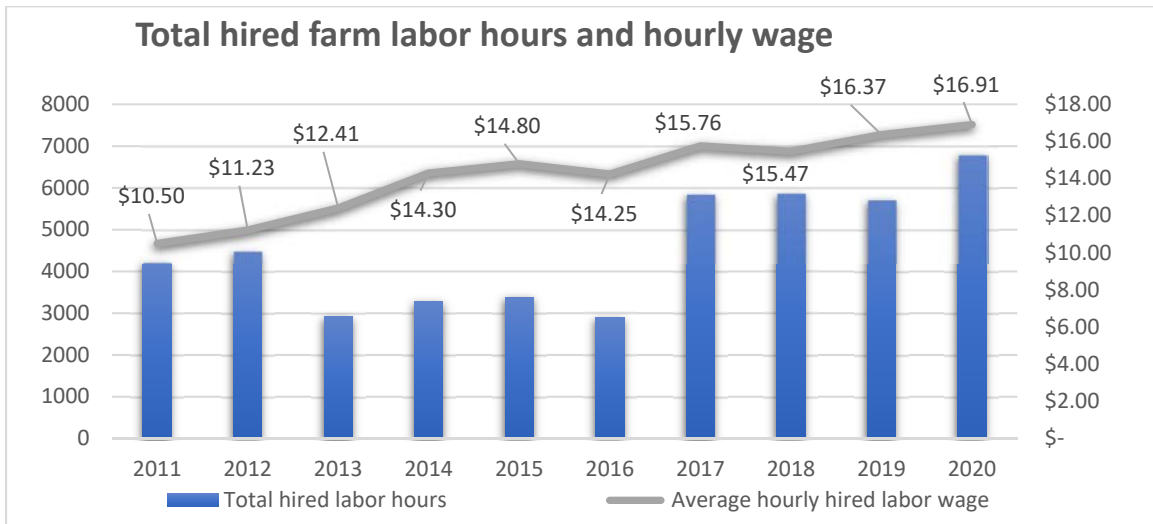
## Term Debt

Term debt coverage ratio is one of the most important measures lenders use to evaluate proposed loans. It measures the ability of the business to cover all term debt payments over a period of time. A farm is rated "poor" if the ratio is under 1.25.

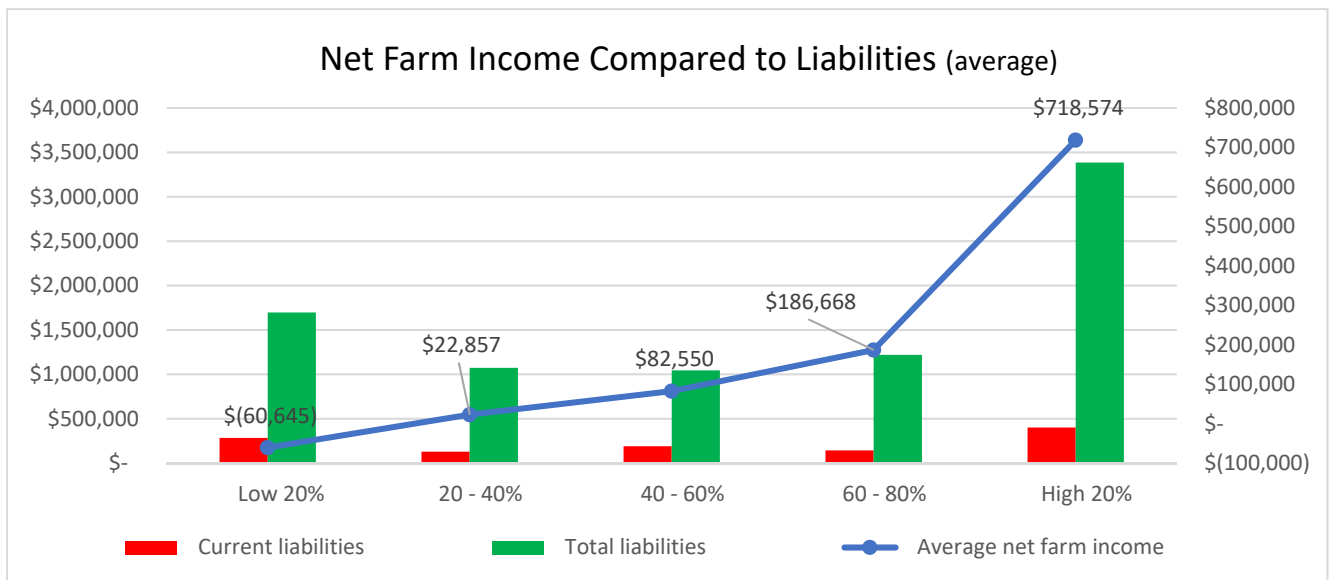


## Labor

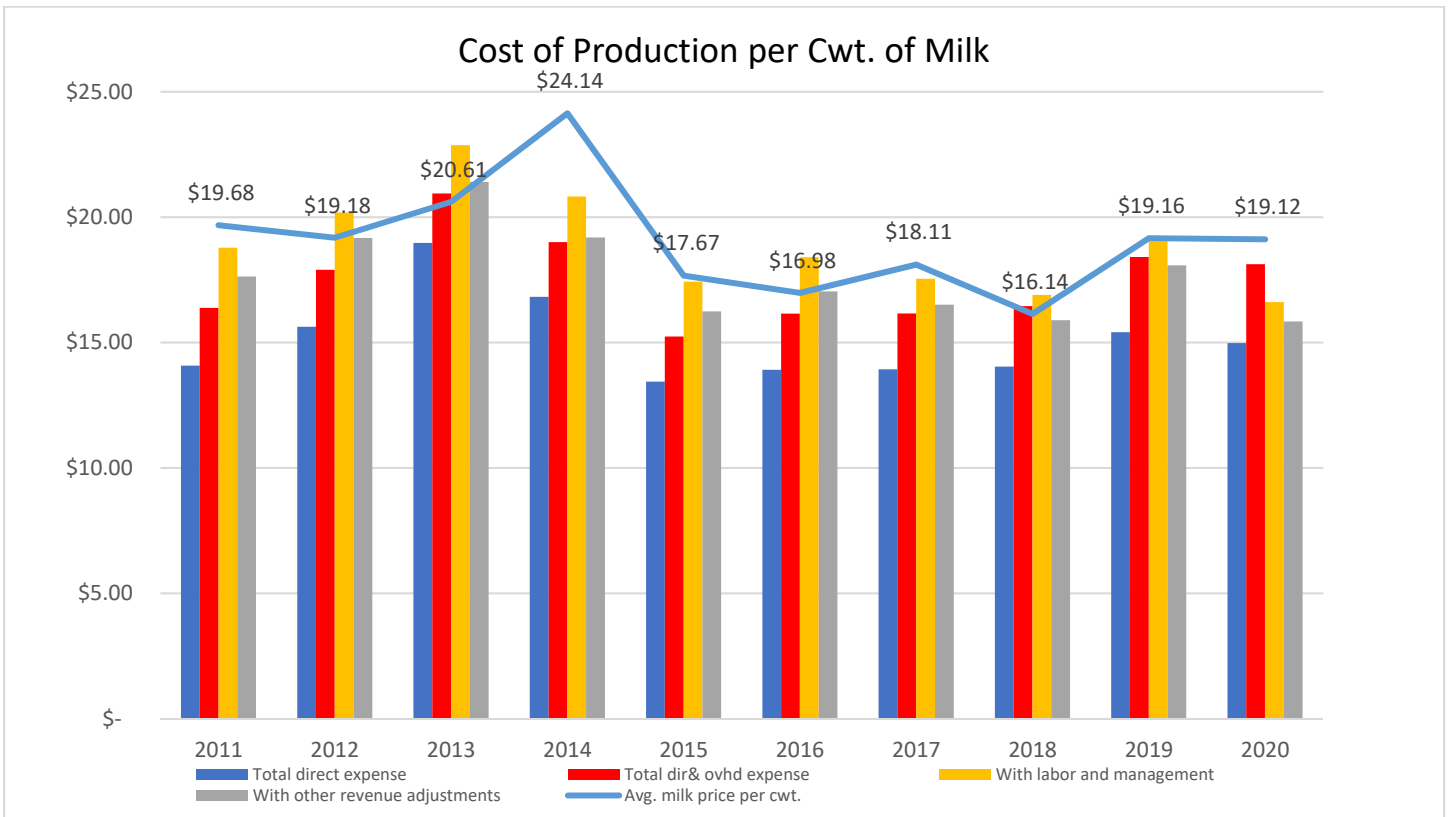
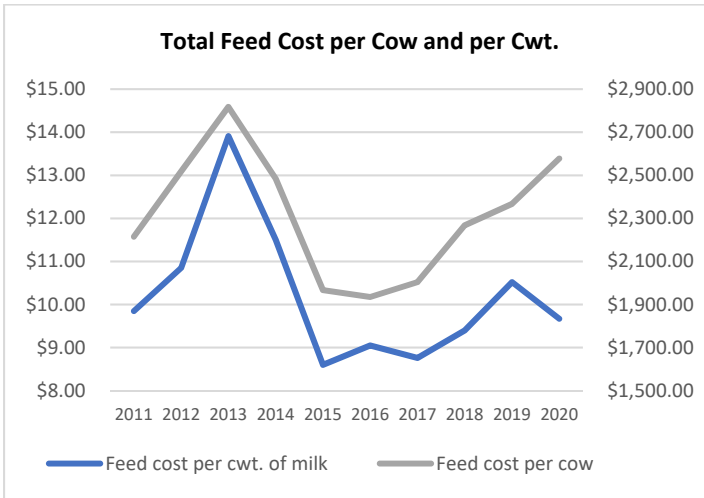
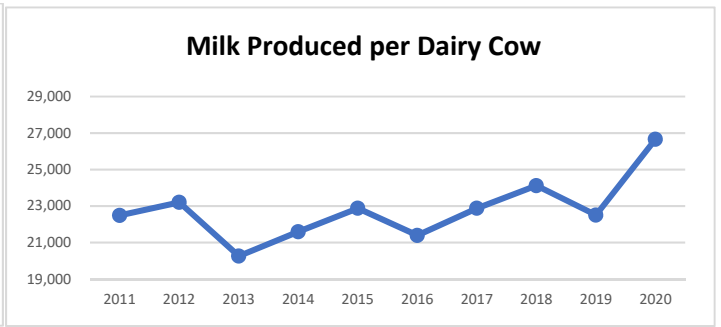
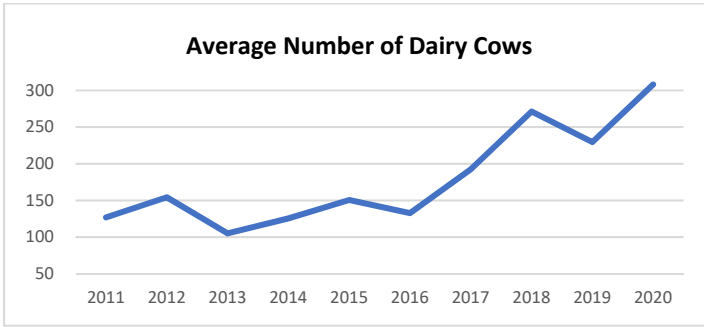
Hired farm labor wages continue to raise as the farms compete with in-town businesses.



## Financial Breakdown

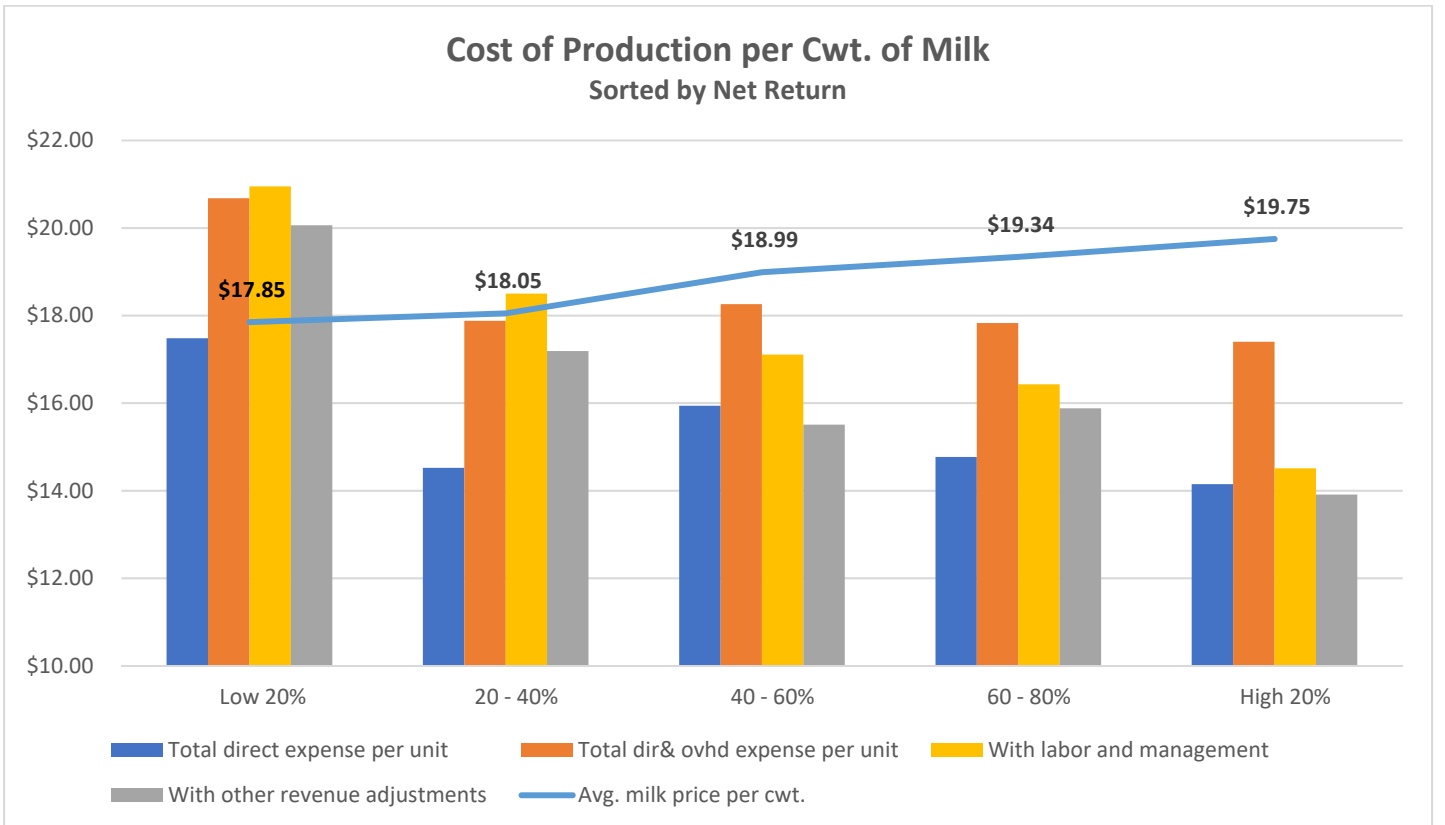
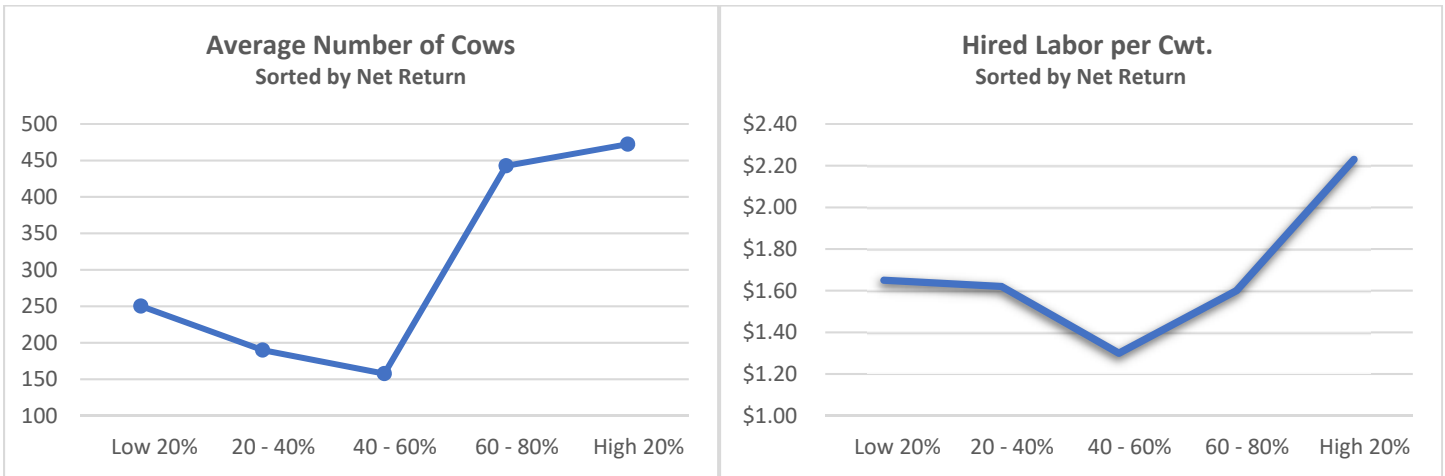
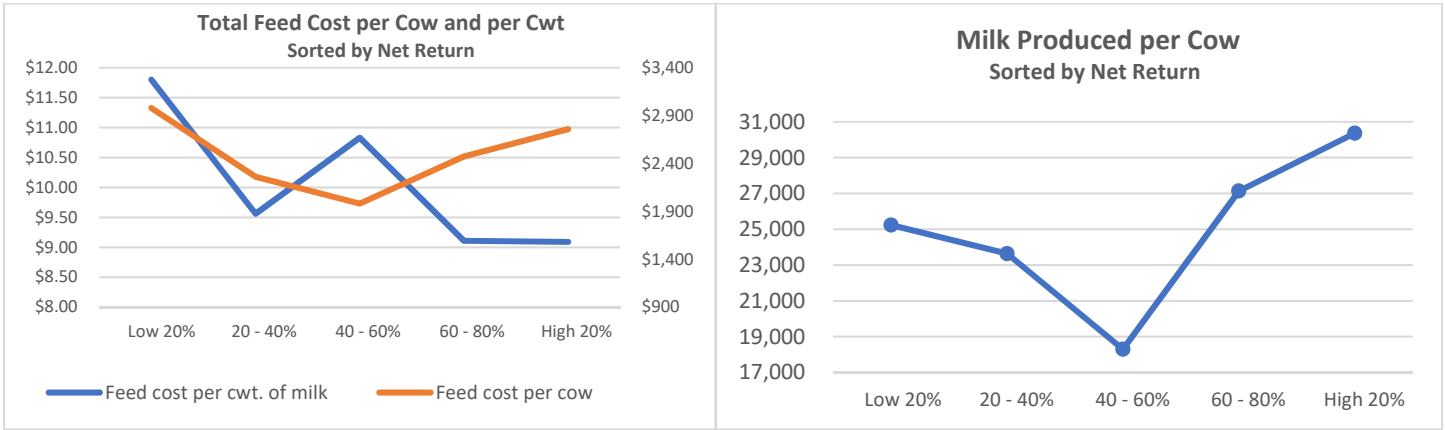


## Dairy Enterprise Charts over Time (Non-Organic)

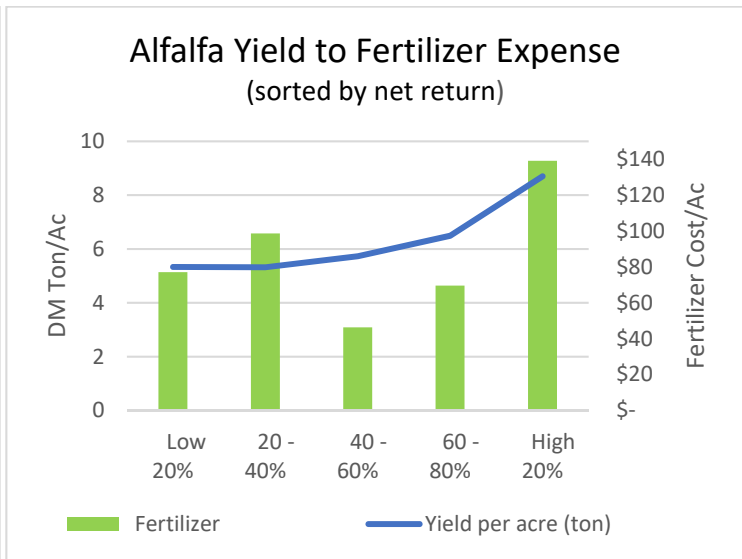
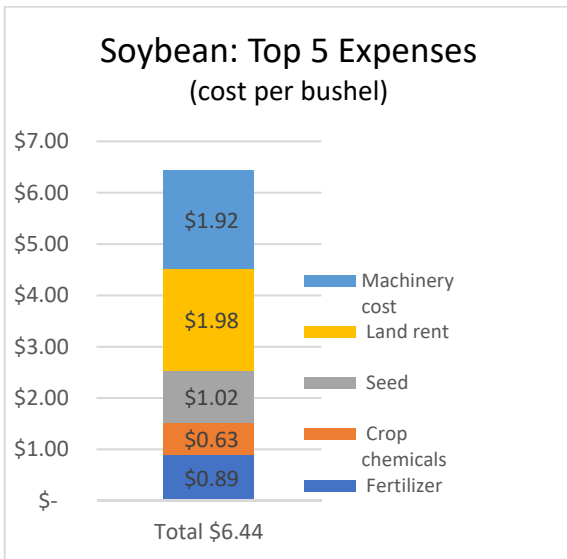
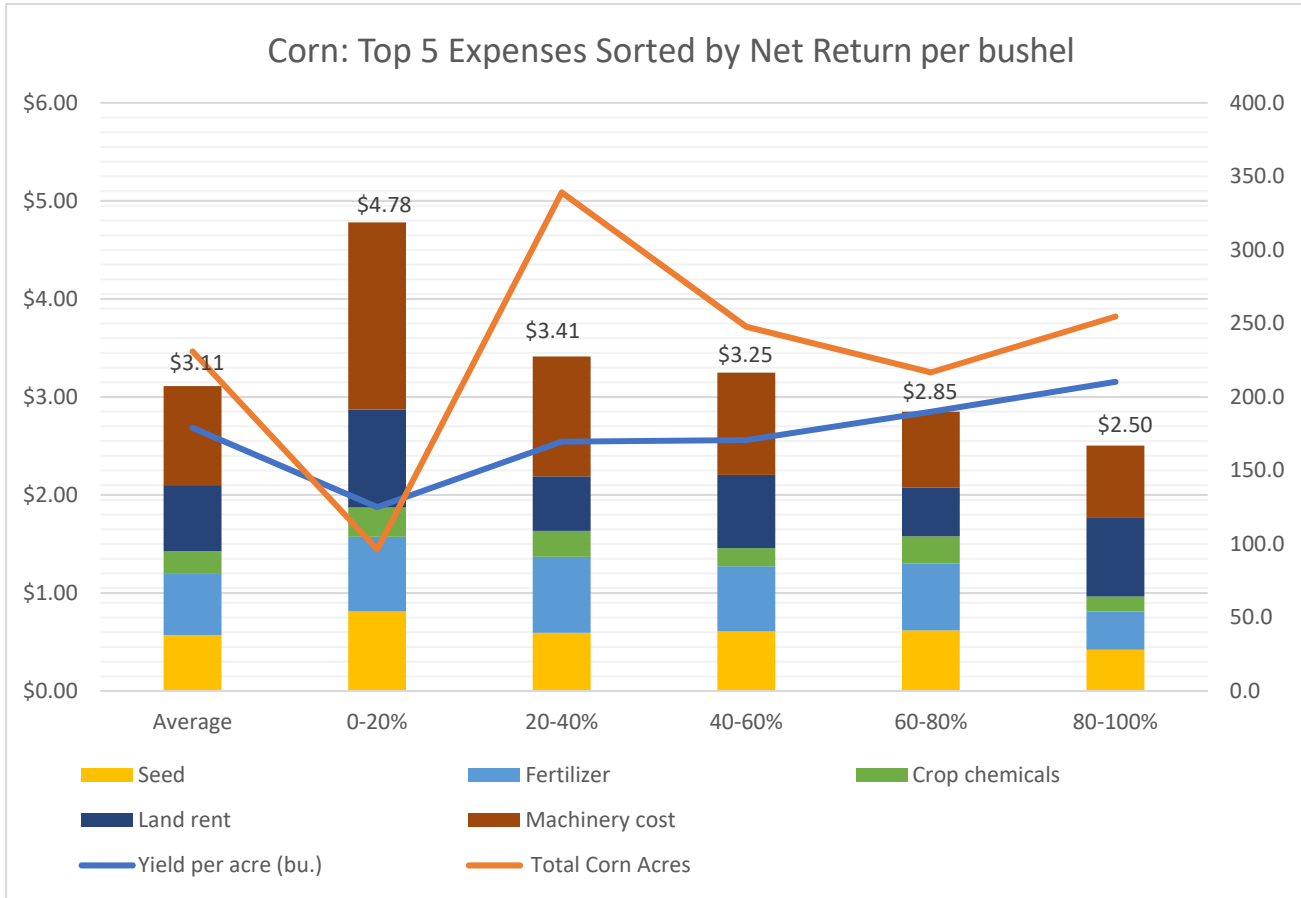




## Dairy Enterprise Charts 2020 (Non-Organic)



# Crop Enterprise Summary Charts



## How does the farm benefit from the data?

Farms who complete a financial analysis, not only can see how they are doing financially, but they can also see how they stack up against other farms. Benchmark reports can be based on type, size, age, or location. Financially sound farms keep rural communities thriving. FBPM instructors work to help educate farmers on their farm financial position and goals; striving to make them a better business manager. Farms that complete an analysis annually, can track their information over time. A recently developed tool called, Plan on a Page has been shown to be very useful for trend analysis, budgeting and goal setting for the following year. Below is an example of the plan on a page.

### *Plan on a Page*

### *Example Report*

	3-year Average	2020 Actual	Group Benchmark	2021 Projected
<b>Income Statement</b>				
Gross cash farm income	1,798,706	2,238,769	818,554	1,637,586
Total cash operating expense	-1,683,836	-1,990,985	-698,804	-738,802
Inventory change	101,969	245,173	94,202	-628,603
Depreciation	-111,679	-116,635	-50,926	-142,004
Net farm income from operations	105,159	376,322	163,026	128,178
<b>Balance Sheet (Market Value)</b>				
Total assets	4,323,263	4,531,910	3,081,496	4,229,960
Total liabilities - ending (cost)	1,682,600	1,591,029	994,938	1,160,901
Net worth - ending (market, exclude def liabilities)	2,640,663	2,940,881	2,086,558	3,069,058
Change in retained earnings	102,665	382,784	168,115	128,178
Net worth change (market, exclude def liabilities)	140,200	412,395	223,619	128,178
<b>Farm Financial Standards Measures</b>				
Current ratio	0.99	1.32	2.00	2.42
Working capital	-5,936	151,709	294,224	276,633
Working capital to gross revenue	-1.2	6.4	100.3	24.8
Debt to asset ratio (market, exclude def liabilities) - ending	39	35	35	27
Rate of return on assets (cost)	4.7	13.1	7.9	
Rate of return on equity (cost)	4.4	21.2	11.1	
Operating profit margin (cost)	11.3	26.6	20.9	
Asset turnover rate (cost)	41.4	49.1	37.6	
Term debt coverage ratio (farm)	1.37	2.74	2.78	1.57
Operating expense ratio	84.0	75.8	71.8	70.6
Net farm income ratio	5.6	16.0	18.2	11.5
<b>Repayment Capacity (farm &amp; personal)</b>				
Net farm income from operations	105,159	376,322	163,026	128,178
Depreciation	111,679	116,635	50,926	142,004
Personal income	0	0	46,453	0
Owner withdrawals / Adjusted family living	0	0	-46,759	0
Income tax (accrued)	0	0	-7,999	0
Interest on term debt	65,868	61,380	28,924	55,239
Capital debt repayment capacity	282,707	554,337	236,103	325,421
Scheduled farm and personal term debt payments	-206,169	-202,555	-88,045	-207,829
Capital debt repayment margin	76,538	351,782	148,058	117,592
Term debt coverage ratio	1.37	2.74	2.81	1.57

The historic farm information, along with a cash flow projection, can strengthen a farms communication and relationship with their lender, as well as, speed up the lending process. It also provides information to assist future discussions and business planning decisions.

## Collaborators:



Data from this report is from 124 farms. The farmers are enrolled in a class in the Farm Business & Production Management program through the Wisconsin Technical College System. Colleges submitting farm analysis for the report are Chippewa Valley, Fox Valley, Northeast, Southwest & Western Technical Colleges.

This report was developed using FINPACK and RANKEM software developed by the Center for Farm Financial Management at the University of Minnesota. <http://www.cffm.umn.edu/>

Additional farm financial reports can be queried from the Center for Farm Financial Management FINBIN website. <https://finbin.umn.edu/>

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