



MINNESOTA STATE

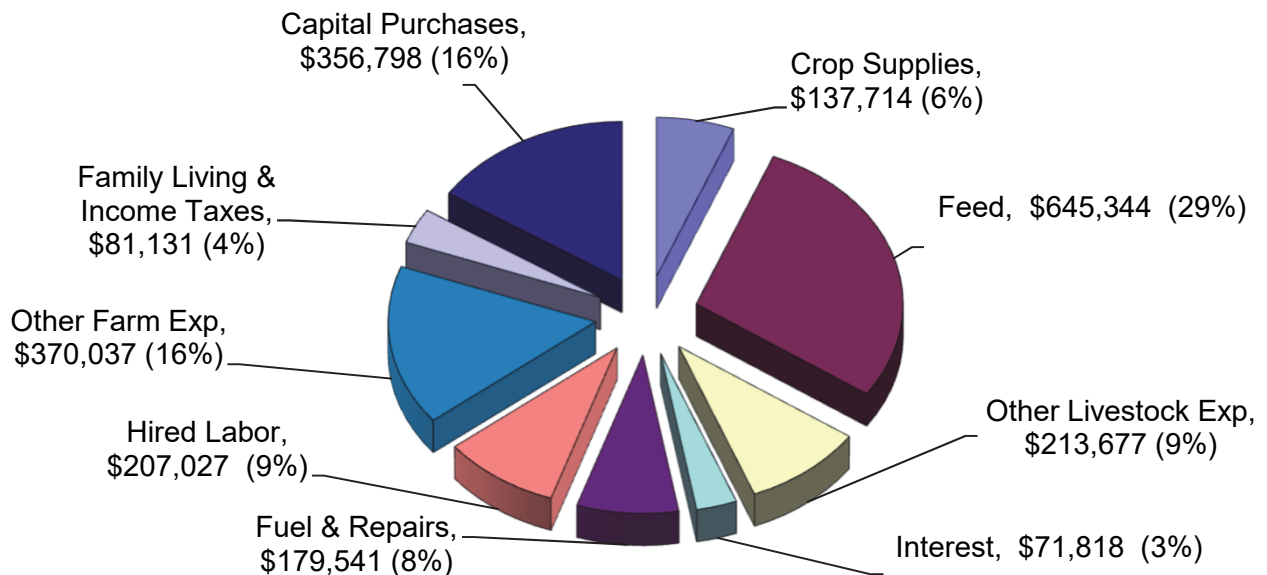
# Farm Business Management Program Database

## Dairy Farm Sort - 2024

Financial Sort By Gross Revenue & Enterprise Sort Data by Herd Size  
Selected Production Practice Sorts, 5-yr & Long Term Trends of Selected Data

April 2025

**Average Dollars Spent by a Dairy Farm: \$2,263,087**



In Cooperation with the Center for Farm Financial Management, University of Minnesota  
Compiled by Nathan Converse

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Farm Business Management Website: [agcentric.org](http://agcentric.org) or [centerofagriculture.org](http://centerofagriculture.org)

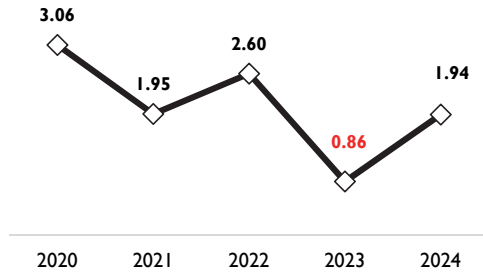
## A Brief Overview of 2024

This report summarizes data from the Minnesota State Farm Business Management (FBM) Database to provide specialized information for Minnesota dairy producers.

The farms in this report spent \$520,510,010 in their greater communities in 2024. The majority of the money is spent locally, including businesses and cooperatives, demonstrating the vital importance of farming on the economy of Minnesota. This report is designed to provide an overview of both the whole farm financial picture for dairy operations, and provide insight into the dairy enterprise based on herd size.

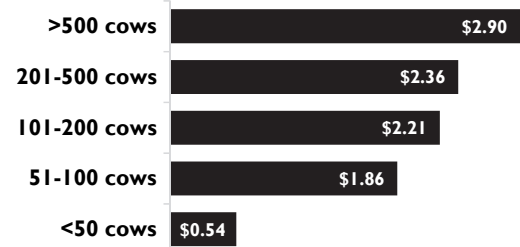
### Debt Coverage Ratios Improve in 2024

A Debt Coverage Ratio of 1.94 indicates that dairy farms were able to cover all expenses and scheduled debt payments. This shows substantial improvement from 2023.



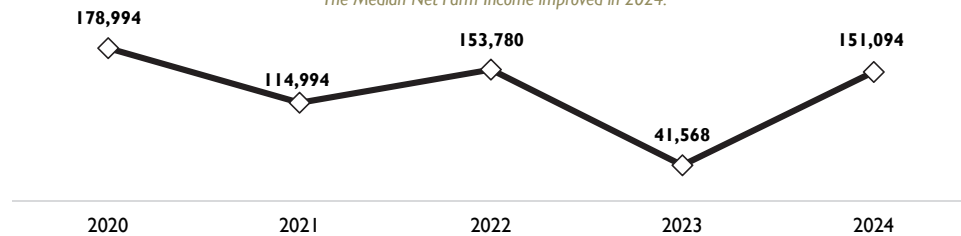
### Net Return by Herd Size

Large herds had the highest net returns (milk price minus cost of production) in 2024.

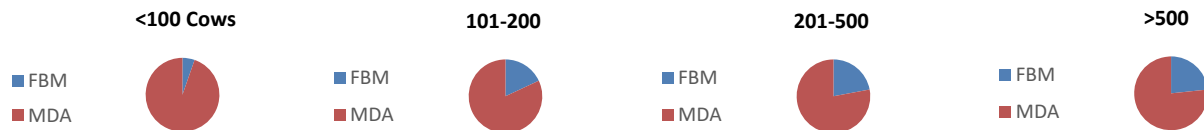


### Net Farm Income Improves in 2024

The Median Net Farm Income improved in 2024.



In cooperation with the Minnesota Department of Agriculture, we have estimated that the data in this report represents the following percentage of dairy herds in the state of Minnesota:



## General Financial Summary

### Farm Business Management Program Database

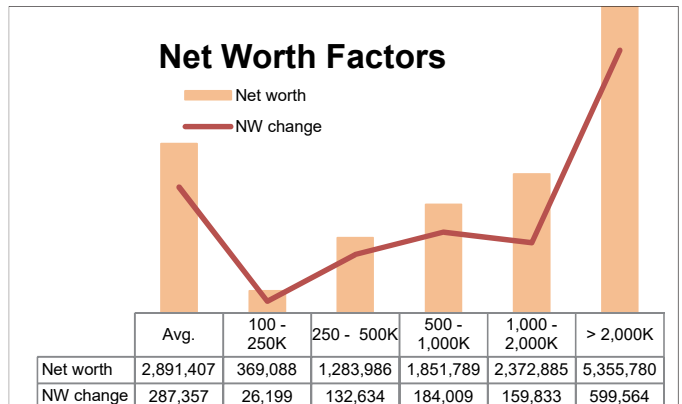
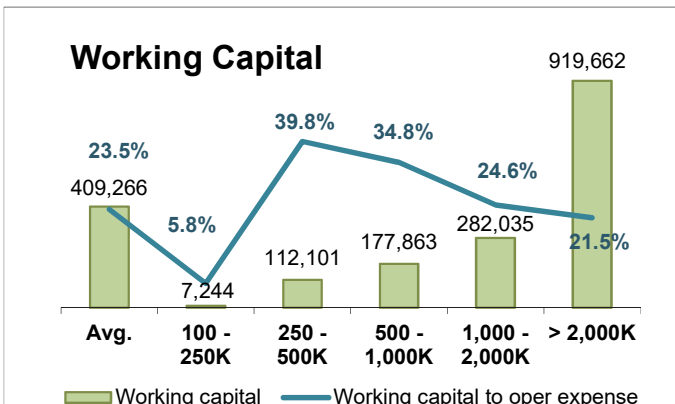
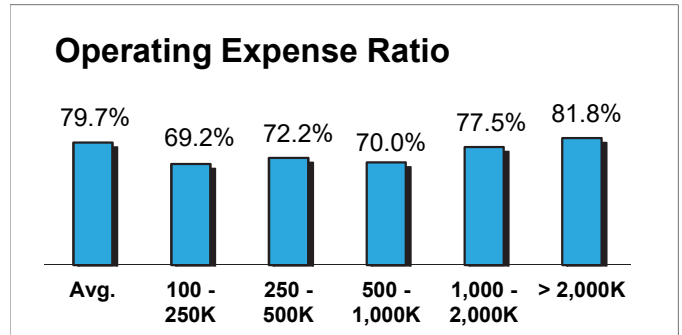
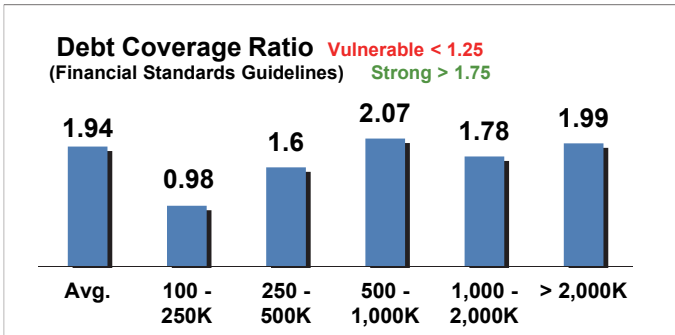
(Dairy Farms Sorted by Gross Farm Income, includes Organic and Organic Transition)

	Avg. Of All Farms	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	230	9	31	61	61	68
<b>Income Statement</b>						
Gross cash farm income	2,120,854	189,166	356,834	688,589	1,435,313	5,080,500
Total cash farm expense	1,825,158	145,844	297,163	545,582	1,208,543	4,445,001
Net cash farm income	295,696	43,322	59,671	143,007	226,770	635,498
Average net farm income	276,607	31,743	56,146	172,999	189,903	580,239
Median net farm income	151,094	40,214	44,821	118,485	193,471	426,544
<b>Solvency (end of year at market)</b>						
Total assets	4,456,043	645,687	1,834,039	2,553,797	3,697,679	8,542,404
Total liabilities	1,564,636	276,599	550,053	702,007	1,324,794	3,186,624
Net worth	2,891,407	369,088	1,283,986	1,851,789	2,372,885	5,355,780
Total net worth change	287,357	26,199	132,634	184,009	159,833	599,564

## Financial Standards Measures

(Dairy Farms Sorted by Gross Farm Income, includes Organic and Organic Transition)

	Avg. Of All Farms	100,000 - 250,000	250,001 - 500,000	500,001 - 1,000,000	1,000,001 - 2,000,000	Over 2,000,000
Number of farms	230	9	31	61	61	68
<b>Liquidity</b>						
Current ratio	2.27	1.16	2.40	2.44	2.27	2.25
Working capital	409,266	7,244	112,101	177,863	282,035	919,662
Working capital to oper expense	23.5%	5.8%	39.8%	34.8%	24.6%	21.5%
<b>Solvency (market)</b>						
Farm debt to asset ratio	44%	51%	42%	38%	44%	45%
Farm equity to asset ratio	56%	49%	58%	62%	56%	55%
Change in total net worth %	11%	8%	12%	11%	7%	13%
<b>Profitability (cost)</b>						
Rate of return on farm assets	7.1%	2.5%	3.6%	6.7%	5.1%	8.2%
Rate of return on farm equity	8.9%	-0.9%	3.0%	8.2%	5.8%	10.5%
Operating profit margin	15.9%	10.0%	12.9%	20.5%	13.4%	16.1%
Net farm income (avg)	276,607	31,743	56,146	172,999	189,903	580,239
EBITDA	444,974	55,526	108,484	219,444	334,062	951,727
<b>Repayment Capacity</b>						
Debt repayment capacity	376,150	41,450	91,031	174,286	268,493	828,086
Debt repayment margin	181,778	-745	34,008	90,119	117,855	412,867
Debt coverage ratio	1.94	0.98	1.6	2.07	1.78	1.99
Replacement coverage ratio	1.63	0.93	1.3	1.65	1.44	1.72
Term debt to EBITDA	2.56	4.22	3.75	2.40	3.23	2.30
<b>Efficiency</b>						
Asset turnover rate (cost)	44.9%	25.1%	28.2%	32.7%	38.3%	51.0%
Operating expense ratio	79.7%	69.2%	72.2%	70.0%	77.5%	81.8%
Depreciation expense ratio	4.9%	5.4%	7.5%	6.3%	6.8%	4.2%
Interest expense ratio	3.3%	7.9%	5.6%	3.9%	3.8%	3.0%
Net farm income ratio	12.1%	17.4%	14.7%	19.8%	11.9%	11.0%

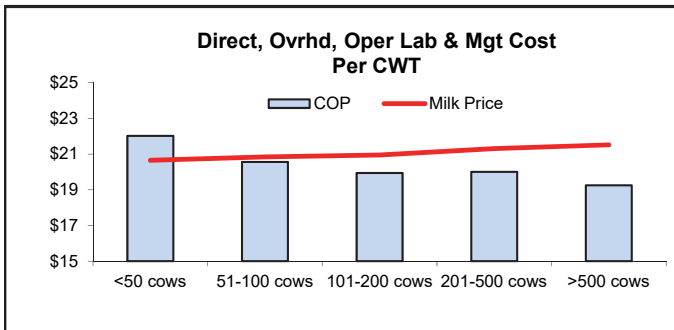
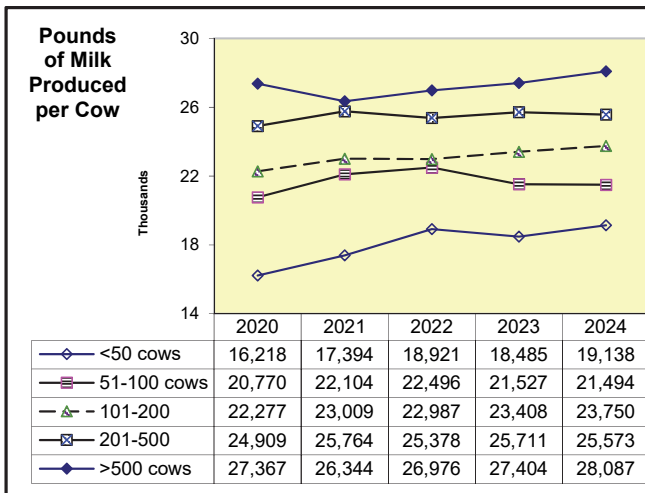
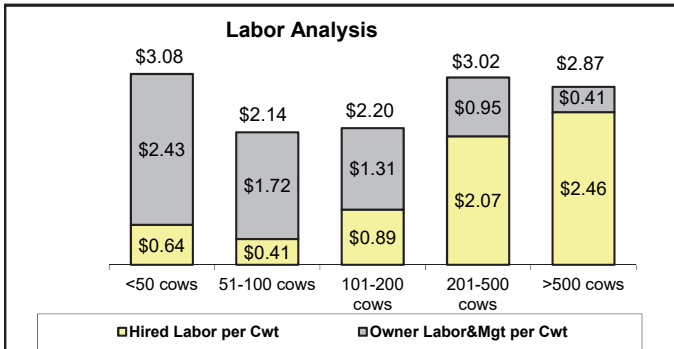
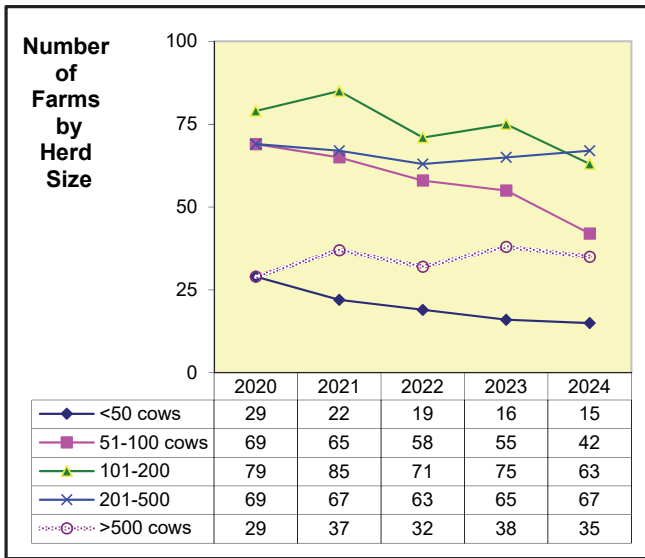
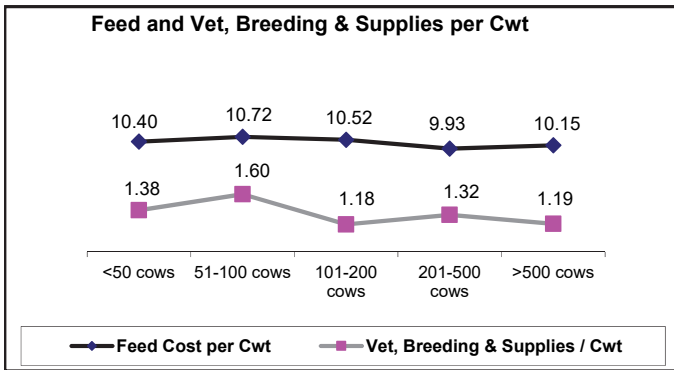


State Database <b>Dairy Cow Enterprise</b> <i>(Excludes Organic and Organic Transition)</i>	Sorted by Average Number of Dairy Cows					
	Average	Up to 50 Cows	51 to 100 Cows	101 to 200 Cows	201 To 500 Cows	Over 500 Cows
	***** Per Cow *****					
<b>Number Of Farms</b>	<b>222</b>	<b>15</b>	<b>42</b>	<b>63</b>	<b>67</b>	<b>35</b>
Milk sold (hd)	5,610.95	3,931.53	4,453.13	4,958.61	5,425.83	6,018.31
Dairy Calves sold (hd)	244.63	52.65	158.93	205.74	201.77	290.33
Transferred out (hd)	65.44	148.11	82.92	68.29	109.84	36.19
Cull sales (hd)	430.11	434.61	470.43	424.06	428.16	429.00
Government payments	12.21	12.21	20.49	19.33	16.89	6.96
Other income (includes DRP insurance)	77.56	50.77	29.82	38.84	57.44	103.78
Purchased & Transferred in (hd)	-68.50	-198.98	-42.27	-81.05	-93.89	-50.84
Inventory change (hd)	26.32	24.75	3.29	49.82	32.69	18.84
Dairy repl cost	-729.42	-601.68	-728.67	-735.69	-702.49	-745.61
<b>Gross margin</b>	<b>5,669.31</b>	<b>3,853.97</b>	<b>4,448.08</b>	<b>4,947.96</b>	<b>5,476.24</b>	<b>6,106.95</b>
<b>Direct Expenses</b>						
Protein Vit Minerals	946.80	680.65	939.37	863.48	795.51	1,060.13
Complete Ration	558.51	111.90	220.51	441.30	669.98	563.16
Corn	323.74	290.27	298.07	299.78	290.58	351.78
Corn Silage	465.17	359.12	366.09	427.55	413.38	515.36
Hay, Alfalfa	238.12	406.28	331.49	367.55	232.52	196.95
Other forages	146.28	142.70	149.43	98.23	136.32	163.98
Breeding fees	56.15	54.94	54.78	50.44	54.51	58.69
Veterinary	109.69	57.85	97.19	90.41	106.61	118.41
Supplies	162.00	151.46	192.72	140.08	175.49	157.21
Fuel & oil	98.13	85.64	86.37	98.19	105.64	95.10
Repairs	234.88	204.94	224.08	229.07	259.79	223.58
Custom hire	95.04	33.52	43.10	57.22	72.09	123.64
Hired labor	418.88	55.33	32.47	105.13	329.30	591.65
Hauling, & Trucking	128.42	109.52	112.88	117.24	110.80	143.12
Marketing	57.82	46.55	45.84	51.75	54.47	62.58
Bedding	92.35	71.66	79.97	91.21	94.06	93.16
Other direct expenses	115.78	166.41	128.66	126.02	114.08	112.05
Total direct expenses	4,247.76	3,028.74	3,403.02	3,654.65	4,015.13	4,630.55
Return over direct expense	1,421.55	825.23	1,045.06	1,293.31	1,461.11	1,476.41
<b>Overhead Expenses</b>						
Hired labor	128.29	66.01	56.61	106.33	200.91	99.87
Building & machinery leases	85.53	19.31	9.64	44.71	81.46	106.34
Utilities	64.22	50.68	78.41	89.29	66.03	55.76
Interest	120.97	156.98	111.26	120.88	122.47	120.37
Mach & bldg depreciation	203.23	234.13	220.37	248.41	245.67	165.31
Miscellaneous	131.15	193.98	169.68	158.60	140.80	114.03
Total overhead expenses	733.39	721.09	645.97	768.22	857.34	661.68
Total dir & ovhd expenses	4,981.15	3,749.83	4,048.98	4,422.87	4,872.47	5,292.23
<b>Net return</b>	<b>688.16</b>	<b>104.15</b>	<b>399.10</b>	<b>525.09</b>	<b>603.77</b>	<b>814.73</b>
Labor & management charge	193.19	465.60	370.17	311.95	241.83	114.14
Net return over lbr & mgt	494.97	-361.46	28.93	213.14	361.94	700.58
<b>Cost of Production per CWT</b>						
Total direct expense per cwt.	16.10	15.83	15.83	15.39	15.70	16.49
Total dir& ovhd expense per cwt.	18.88	19.59	18.84	18.62	19.05	18.84
With other revenue adjustments	18.71	20.09	18.95	18.72	18.92	18.57
With labor and management	19.44	22.52	20.67	20.04	19.87	18.97
Est. labor hours per unit	39.7	40.9	33.6	35.8	37.3	42.5
<b>Other Information</b>						
<b>Avg. number of Cows</b>	<b>303</b>	<b>41</b>	<b>76</b>	<b>140</b>	<b>298</b>	<b>994</b>
Milk produced per Cow	26,380	19,138	21,494	23,750	25,573	28,087
Energy corrected milk per cow	28,982	20,770	23,505	26,010	28,045	30,920
Lbs of fat & protein per cow	1,970	1,402	1,599	1,771	1,906	2,102
Turnover rate	34.7	39.6	38.5	35.7	35.8	33.5
Feed cost per head per day	7.34	5.45	6.31	6.84	6.95	7.81
Feed cost per cwt of milk	10.15	10.40	10.72	10.52	9.93	10.15
Feed cost per Cow	2,678.63	1,990.91	2,304.94	2,497.88	2,538.28	2,851.36
Avg. milk price per cwt.	21.36	20.65	20.85	20.95	21.31	21.52
Milk price / feed margin	11.20	10.25	10.13	10.43	11.38	11.36

## Selected Dairy Enterprise Factors from the Farm Business Management Program Database

(excludes Organic and Organic Transition)

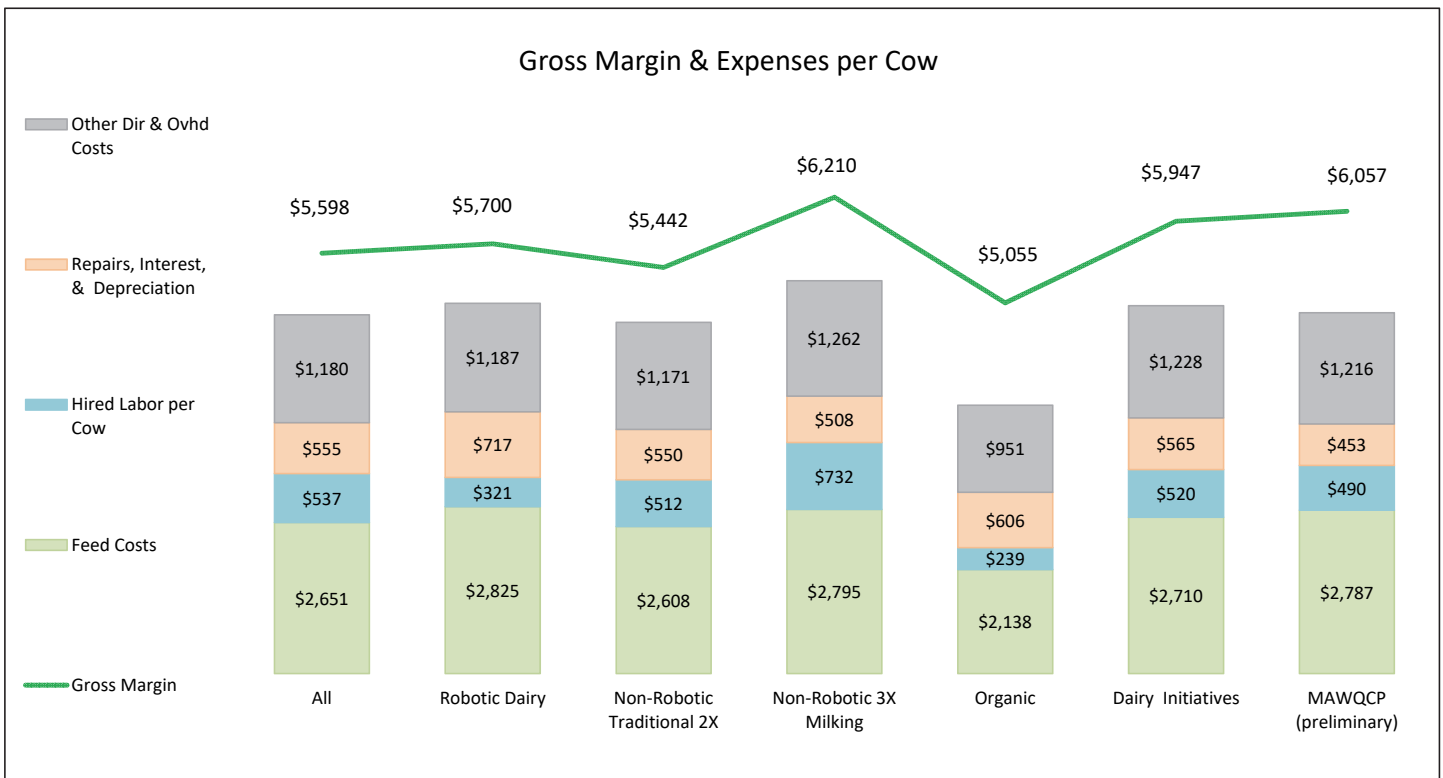
Herd Size	State Avg.	up to 50 cows	51-100 cows	101-200 cows	201-500 cows	over 500 cows
Number of Farms	222	15	42	63	67	35
Avg # of Cows	303	41	76	140	298	994
Milk Prod. Per Cow	26,380	19,138	21,494	23,750	25,573	28,087
Feed Cost per Cwt	10.15	10.40	10.72	10.52	9.93	10.15
Interest per Cwt	0.46	0.82	0.52	0.51	0.48	0.43
Vet, Breeding & Supplies / Cwt	1.24	1.38	1.60	1.18	1.32	1.19
Hired Labor per Cwt	2.07	0.64	0.41	0.89	2.07	2.46
Deprec/Lease per Cwt	0.77	1.32	1.07	1.23	1.28	0.97
Milk Price per Cwt	21.36	20.65	20.85	20.95	21.31	21.52
Dir & Ovhd Cost per Cwt	18.88	19.59	18.84	18.62	19.05	18.84
Return over Dir & Ovhd per Cow	688	104	399	525	604	815
Herd Profit over Dir&Ovhd	208,788	4,291	30,172	73,565	179,742	809,597
Owner Labor&Mgt per Cwt	0.73	2.43	1.72	1.31	0.95	0.41
Net per Cow after Labor&Mgt	495	-361	29	213	362	701
Herd Profit over Labor&Mgt	150,174	-14,892	2,187	29,861	107,750	696,176



## Additional Selected Sorts within the Dairy Enterprise

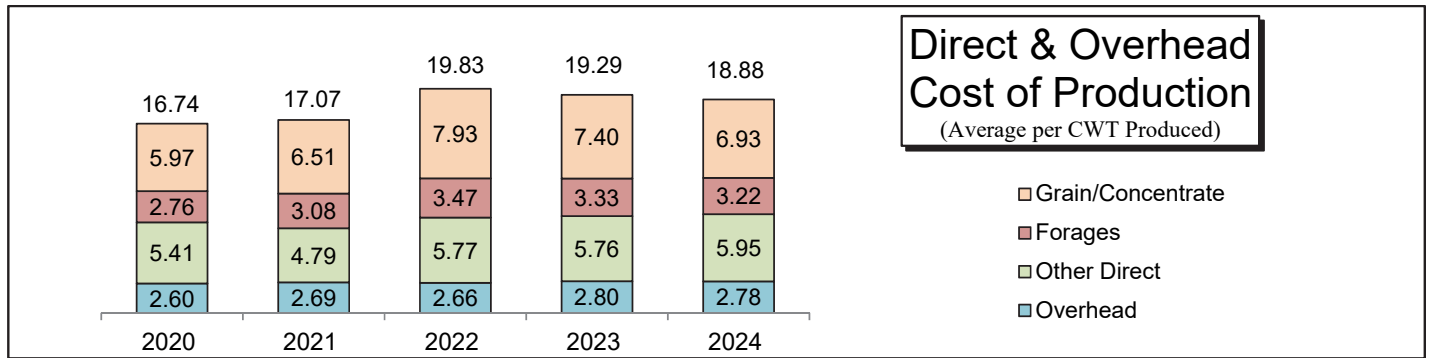
The State Database provides the opportunity to dig deeper into the data using special markers on farms with different practices. Using the FINPACK & RankEM Central software from the Center for Farm Financial Management, specific production practices can be included or excluded from a given sort. This enables selected practices to be compared. Below is a sample of the sort options which provide another comparative look at Minnesota's State Dairy Data. The MAWQCP sort includes data from conventional non-Organic farms that are enrolled in the Minnesota Agricultural Water Quality Certification Program.

Sort - Includes	All	Robotic Dairy	Non-Robotic Traditional 2X	Non-Robotic 3X Milking	Organic	Dairy Initiatives	MAWQCP (preliminary)
Number of Farms	243	34	164	23	18	54	19
Number of Cows	294	230	252	776	86	278	331
Milk Produced per Cow	26,032	26,672	25,475	28,447	15,456	26,415	26,928
Milk Sold	\$5,557	\$5,660	\$5,394	\$6,120	\$4,994	\$5,801	\$5,906
Gross Margin	\$5,598	\$5,700	\$5,442	\$6,210	\$5,055	\$5,947	\$6,057
Feed Cost per Cow	\$2,651	\$2,825	\$2,608	\$2,795	\$2,138	\$2,710	\$2,787
Breeding Fees	\$56	\$49	\$57	\$58	\$35	\$57	\$55
Veterinary	\$108	\$102	\$103	\$129	\$37	\$113	\$104
Repairs	\$233	\$263	\$229	\$237	\$246	\$260	\$234
Hired Labor per Cow	\$537	\$321	\$512	\$732	\$239	\$520	\$490
Interest	\$118	\$147	\$122	\$107	\$130	\$114	\$62
Depreciation	\$204	\$307	\$200	\$164	\$231	\$191	\$157
Total Dir & Ovhd Cost	\$4,923	\$5,050	\$4,841	\$5,297	\$3,934	\$5,024	\$4,946
Net Return	\$675	\$650	\$601	\$913	\$1,121	\$923	\$1,111
Cost of Prod - O&D	\$18.91	\$18.94	\$19.00	\$18.60	\$25.45	\$19.02	\$18.37
Turnover Rate	34.4	37.4	35.2	32.7	25.8	34.5	35.2
Lbs of fat & protein/Cow	1,939	1,990	1,885	2,169	1,139	1,990	2,046
Energy Corrected Milk/Cow	28,539	29,246	27,824	31,689	16,897	29,256	30,025
Lb. of Milk Sold/FTE	1,787,047	2,619,357	1,751,932	1,884,562	1,188,078	1,749,376	1,748,803
Feed Cost per CWT	\$10.18	\$10.59	\$10.24	\$9.81	\$13.83	\$10.26	\$10.35
Average Milk Price	\$21.43	\$21.31	\$21.25	\$21.60	\$32.72	\$22.12	\$22.11

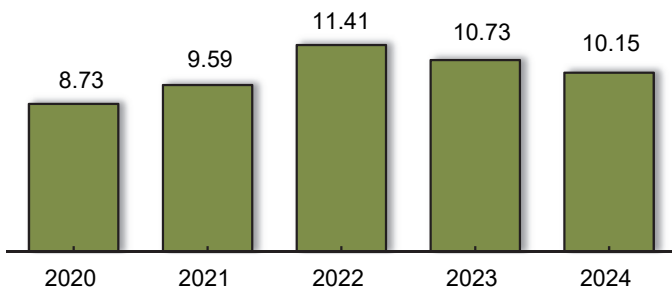


## Summary of Selected Dairy Enterprise Factors - Average Farm Data

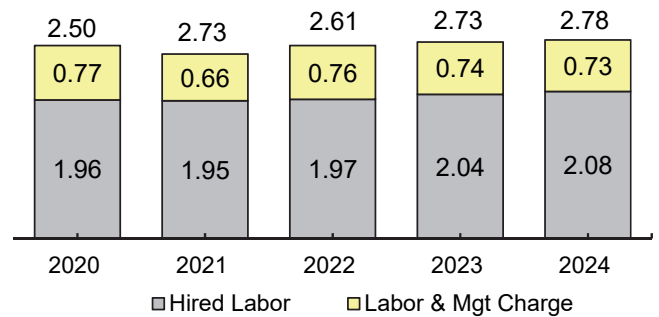
(excludes Organic and Organic Transition)



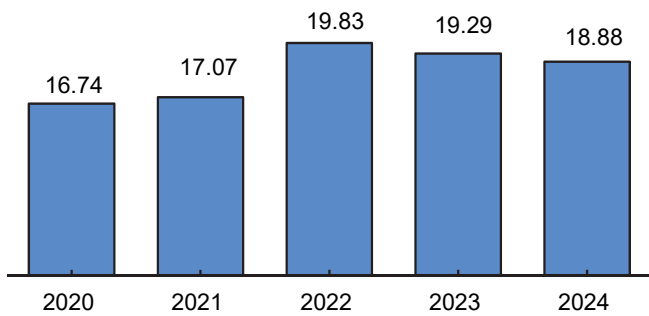
### Feed Cost per CWT



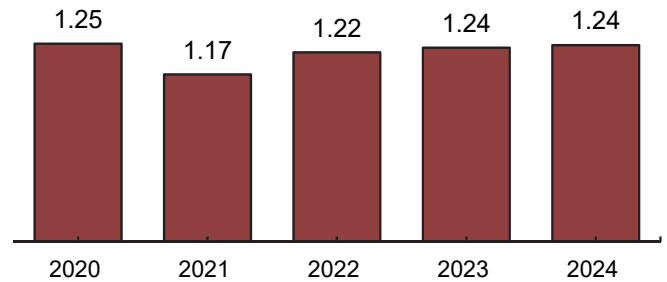
### Labor per CWT



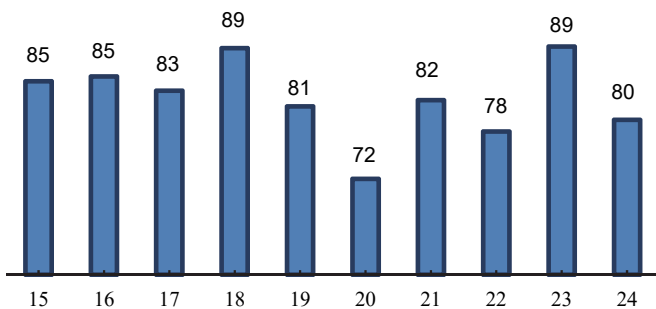
### Dir & Ovhd Exp per CWT



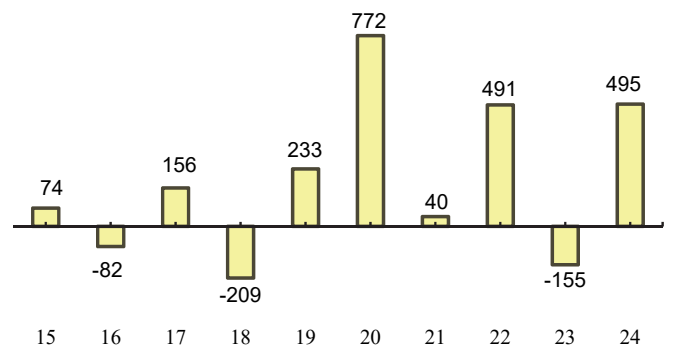
### Vet, Breeding & Supplies



### Operating Expense Ratio



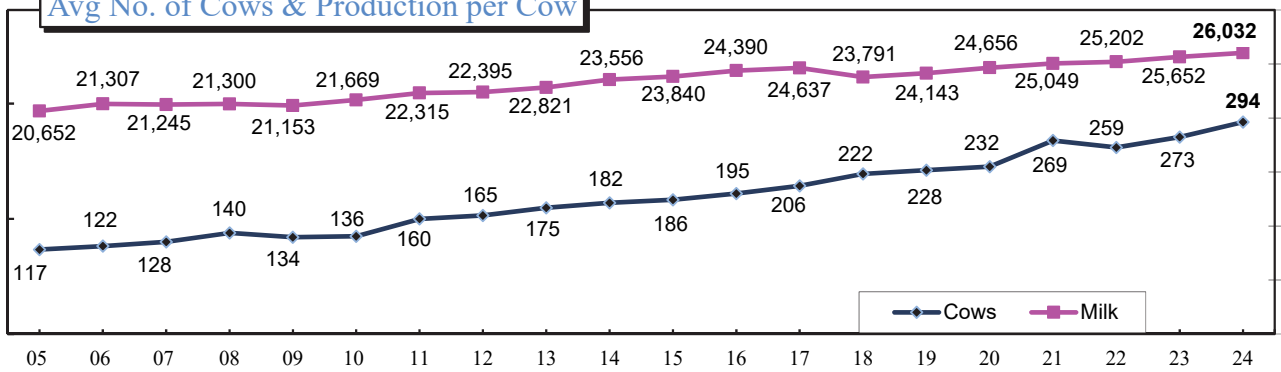
### Net Return after Dir, Ovhd, & Labor



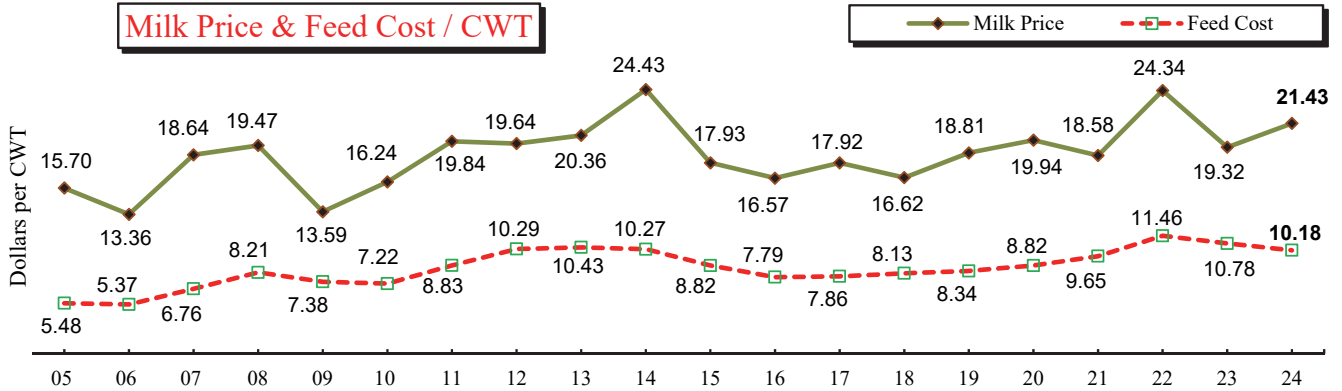
# A Long Term History of Selected Dairy Information

(Includes Organic and Organic Transition)

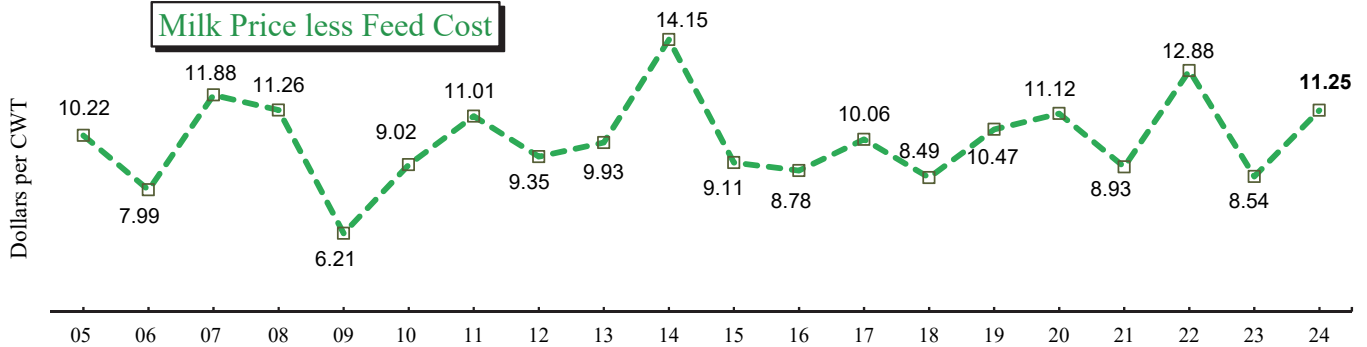
### Avg No. of Cows & Production per Cow



### Milk Price & Feed Cost / CWT



### Milk Price less Feed Cost



### Avg Milk Price Received vs. Total Direct, Ovhd, & Labor

