MILK HAULING CHARGES IN THE UPPER MIDWEST MARKETING AREA

MAY 2021

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Introduction

This study categorizes and analyzes hauling charges based on state, county, and producer size groups for May 2021. The payroll data for 7,581 dairy producers who were associated with the Upper Midwest Federal Milk Order were examined [2]. The Federal Order 30 Market Administrator's producer database allows options for handlers to report a line item fee for hauling that can include, but is not limited to, stop charges, fuel charges, or a flat fee. Some handlers will do a combination of charges necessitating some calculations to arrive at a total hauling charge from the database.

Table 1

Average Hauling Charges for the Marketing Area for May

Statistic	2021	2020
Producer Deliveries (pounds)	3,102,739,088	4,135,379,464
Total Hauling Charges	$10,021,468.89	$11,642,454.62
Weighted Average Charges (per cwt.)	**$0.3230**	**$0.2815**

A flat fee structure leads to a decreasing average hauling charge when viewed on a per hundredweight basis. The possibility also exists that the hauling charge relationship for large producers may differ on a handler by handler basis. This relationship may mean the producer pays all charges external to the handler's payroll or may haul their own milk. Previous analysis has indicated that hauling charges are a function of producer pounds, the farm's distance to plants, the farm's distance to population centers, competition among handlers, and the concentration of dairy farms in the local market.

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[1] The author, Dr. Corey Freije, is an Agricultural Economist with the Market Administrator's Office, Minneapolis, Minnesota.

[2] Changes were made in the methodology of this paper in 2011. The method used prior to 2011 would have resulted in an average hauling charge for 2021 of $0.5087 per cwt., compared to $0.4985 for 2020. These values are possible to calculate using data from Table 3. Data from 2011 to present are aggregated at the farm level and restricted to States within Federal Order 30 resulting in lower farm counts compared to earlier analysis. The hauling charges in Table 1 are weighted by producer and state.

Analysis by Size Group

Table 2 presents the May 2021 data for each of ten size groups. Skewness dominates the results in Table 2, with nearly 70% of the milk produced by 13% of the farms. In addition, these largest categories of farms pay 57% of the total hauling charges. Chart 3, on Page 8, shows the inverse relationship between average pounds of production and average hauling charges for each size category.

Table 2

Average Producer Delivery, by Size Range, for May 2021

Size Range	Simple Average Hauling Charges	Total Hauling Charges	Production	Number of Farms	Producer Average Monthly Delivery	Weighted Average Hauling Charge
(pounds)	($ per cwt.)	($)	(pounds)		(pounds)	($ per cwt.)
Up to 49,999	0.7934	283,731.20	38,989,026	1,360	28,668	0.7277
50,000 to 99,999	0.4927	591,032.70	122,084,746	1,650	73,991	0.4841
100,000 to 249,999	0.4252	1,597,281.08	373,296,070	2,405	155,217	0.4279
250,000 to 399,999	0.4303	947,411.44	221,193,345	706	313,305	0.4283
400,000 to 599,999	0.4330	939,792.33	217,390,278	448	485,246	0.4323
600,000 to 999,999	0.3825	1,162,944.47	300,022,137	394	761,478	0.3876
1,000,000 to 1,499,999	0.3432	873,809.52	256,831,094	209	1,228,857	0.3402
1,500,000 to 2,499,999	0.3296	1,217,528.70	370,536,978	191	1,939,984	0.3286
2,500,000 to 4,999,999	0.2316	1,084,633.86	476,148,423	136	3,501,091	0.2278
5,000,000 or more	0.2031	1,323,303.59	726,246,991	82	8,856,671	0.1822
Total or Average	**0.4065**	**10,021,468.89**	**3,102,739,088**	**7,581**	**409,278**	**0.3230**

Analysis by State

Table 3 represents the May data for each state comprising the order. Analyzing hauling charges by state has previously led Federal Order 30 staff to hypothesize that non-scale factors affect hauling charges. These include distance to plants and population centers, competition among handlers, along with the predominance of dairying in a market. These factors have been tested and their relevance supported in earlier papers.

Table 3

Average Producer Delivery, by State, for May 2021

State	Simple Average Hauling Charges	Total Hauling Charges	Production	Number of Farms	Producer Average Monthly Deliver	Weighted Average Hauling Charge
	($ per cwt.)	($)	(pounds)		(pounds)	($ per cwt.)
Illinois	0.8755	901,411.61	117,691,708	363	324,220	0.7659
Iowa	0.7485	1,378,483.01	310,901,158	613	507,180	0.4434
Michigan UP	1.0697	62,844.05	10,076,504	27	373,204	0.6237
Minnesota	0.3978	2,128,130.47	778,285,298	1,926	404,094	0.2734
North Dakota	0.9637	98,020.52	14,222,539	8	1,777,817	0.6892
South Dakota	0.7640	361,514.78	162,414,269	115	1,412,298	0.2226
Wisconsin	0.4589	5,091,064.45	1,709,147,612	4,529	377,379	0.2979
Total or Average	**0.7540**	**10,021,468.89**	**3,102,739,088**	**7,581**	**409,278**	**0.3230**

As seen in Table 3, Michigan has the highest simple average hauling charge. The state producers have fewer plants and less handler competition. Minnesota in contrast has a low average hauling charge with a high number of farms generally in close proximity to high demand areas. A topic of interest is how the average pounds in this table do not correlate as well as Table 2 with average hauling charges, implying additional factors determine a farmer's hauling charge.

On the following page, Table 4 shows the May diesel fuel price in relation to the May average hauling charges. Additionally, the table shows the percentage change from the previous year for both the price of fuel and average hauling charges. Both levels are above historical averages, with the hauling charges showing less fluctuation and a dampened overall increase when compared to the more volatile fuel price. That volatility is evident in the large positive and negative percentage changes in fuel prices from year to year. In contrast, the percentage changes in the average hauling charge is much smaller. Given the handlers' tendency to subsidize hauling charges, this smaller volatility indicates a strong tendency to resist passing through the increased hauling costs.

Table 4

Midwest Retail Fuel Price and Average Hauling Charges [3]

Year	May Fuel Price	Change from Previous Year	May Average Hauling Charges	Change from Previous Year
	($ per gallon)	(%)	($ per cwt)	(%)
2011	4.001	31.70	0.3007	- 0.73
2012	3.877	- 3.10	0.3328	10.68
2013	3.907	0.77	0.3183	- 4.36
2014	3.910	0.07	0.3280	3.05
2015	2.764	- 29.31	0.3131	- 4.54
2016	2.282	- 17.44	0.3263	1.44
2017	2.494	9.29	0.3409	4.48
2018	3.179	27.47	0.4793	40.59
2019	3.049	- 4.09	0.5015	4.63
2020	2.24	-26.53	0.4985	-4.74
2021	3.16	41.07	0.5087	2.04

Chart 1 on the next page shows that over 80% of the milk delivered on Federal Order 30 was from Wisconsin and Minnesota. The other states on the order each had 10% or less of the delivered milk. This predominance for Wisconsin and Minnesota indicates that their weighted averages will pull the overall average for the order down relative to North and South Dakota. Wisconsin and Minnesota not only have most of the milk production, but also have close proximity to the majority of the population centers and processing plants.

Chart 2 on Page 6 shows the milk production percentage for each size class and also the percentage of total hauling charges paid by each size class. For the six smallest size classes, the percentage of hauling charges is greater than the percentage of total production. For the latter four classes, their percentage of hauling charges is either about the same, or smaller than, their percentage of production. The most common explanation for this distribution of charges is that hauling costs are higher for smaller farms, given the increased number of stops in order to fill out a load. Chart 3, on Page 8, builds on Chart 2's size range distribution to show that average hauling charges and average milk production are inversely related.

[3] The hauling charges presented are a simple average by state that is then weighted by the state milk production to generate a weighted average for the Federal order. Being based on a state simple average increases the likelihood that it approximates a typical dairy farmer's average hauling charge over an average weighted by every producer's production.

Percentage of Milk Deliveries by State

In May 2021, dairy producers from three states delivered the majority of the milk associated with the Upper Midwest Order. Wisconsin producers delivered the largest volume of any of the states, by supplying 55.1% of the total milk volume associated with the market. Producers from Minnesota and Iowa were second and third, respectively, in milk volume supplied to the order.

Chart 1

Percentage of Delivery Volume, by State, for May 2021

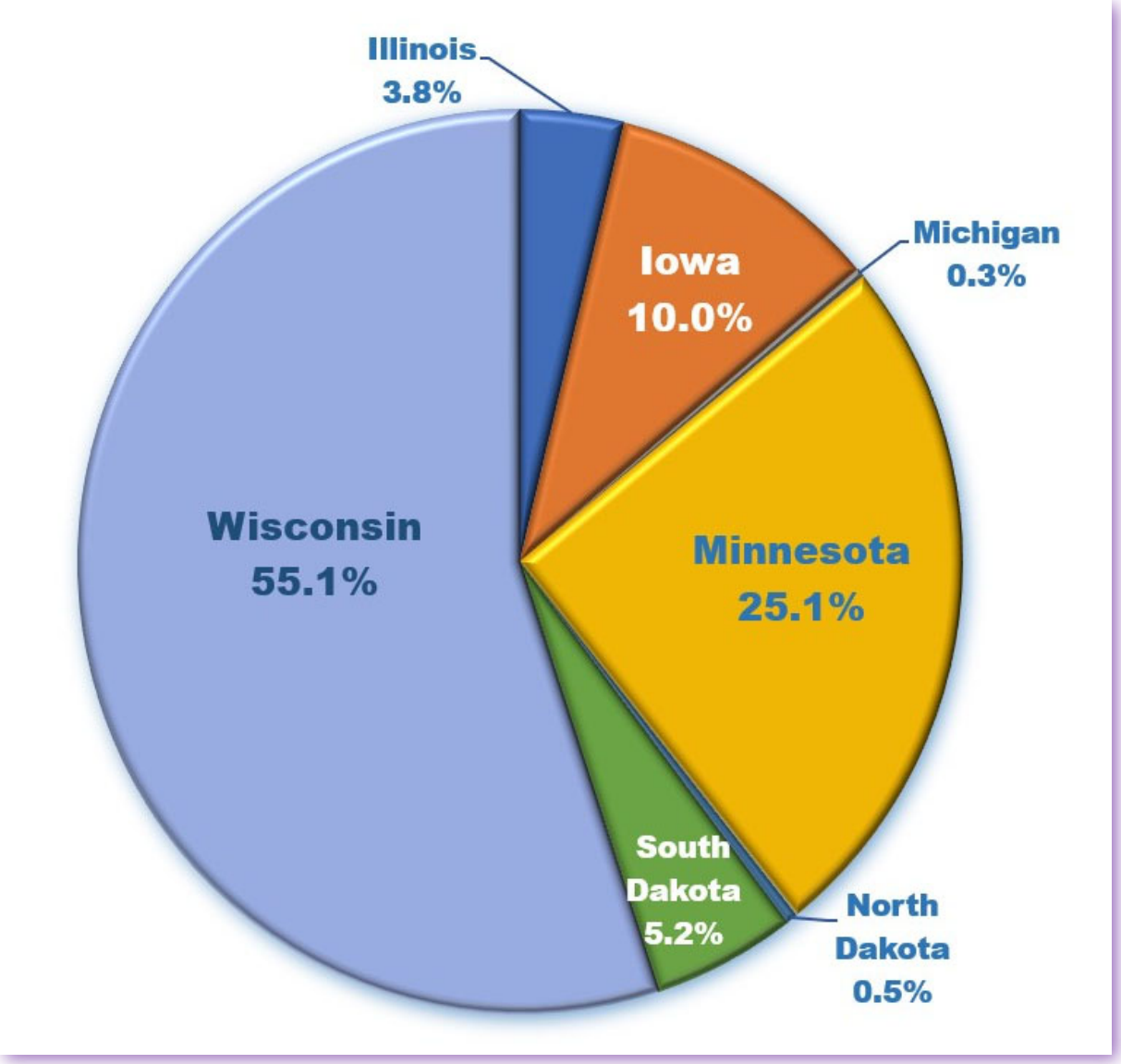
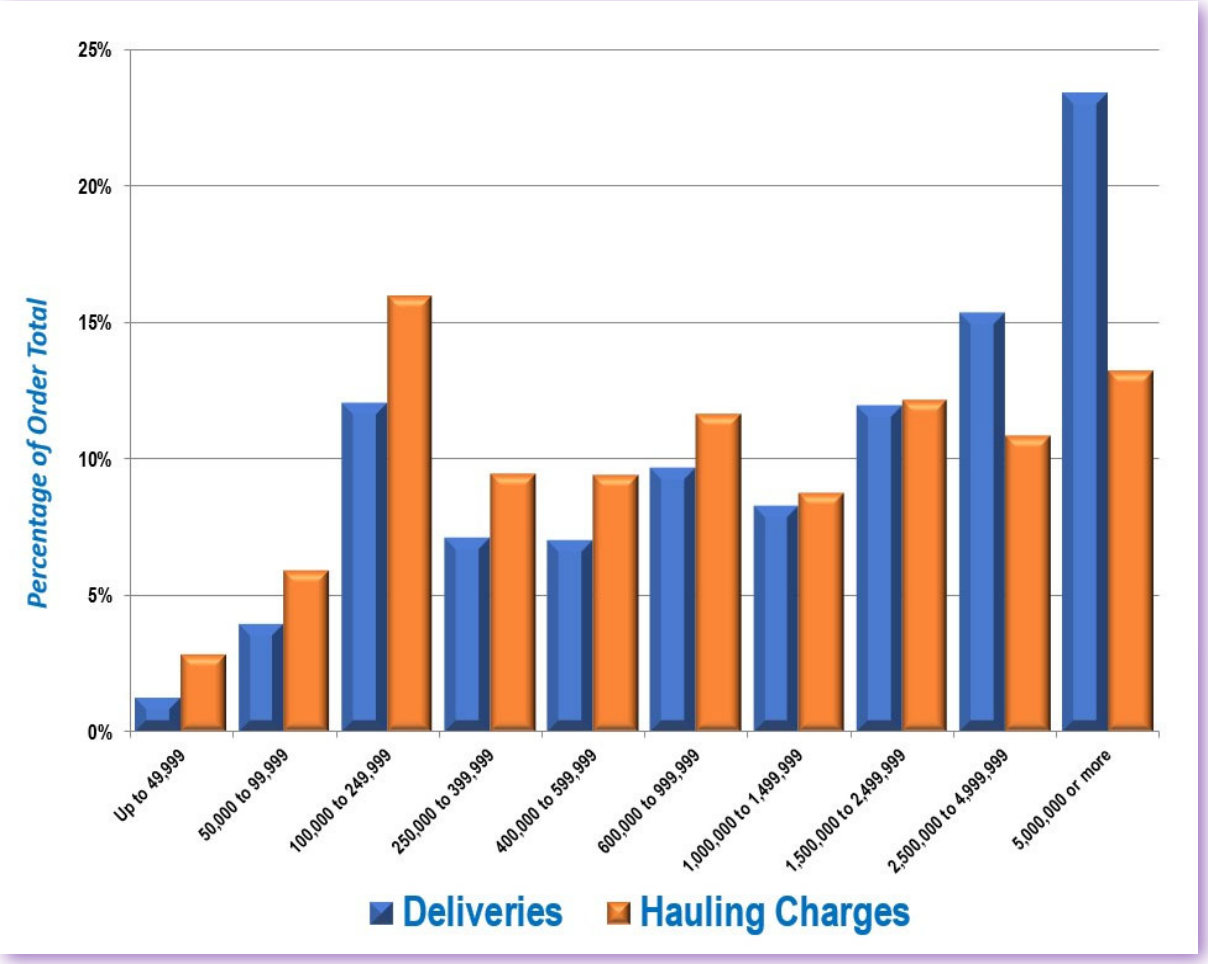


Chart 2

Percentage of Hauling Charges and Producer Deliveries, for May 2021



Average Milk Hauling Charges by Size Range of Producer Delivery

The data shown in Table 5 indicates that there are several other factors that contribute to fluctuating hauling charges. The aforementioned relationship between farm location and distances to competing dairy plant manufacturing operations does not explain all of the variation in average hauling charges. This study found that even though a specific dairy producer may be located a very long distance from the Upper Midwest market's largest fluid milk disposition area, it does not necessarily mean that this producer will pay the market's highest rate per hundredweight for hauling. This study recognizes that other factors exist; including the fact that a dairy producer's herd size or milk volume influences the producer's cost of hauling.

Table 5 displays the market's dairy producers in ten size ranges, or producer milk volume categories. The numbers presented in Table 5 show a strong indication that as a producer's milk volume increases, the average hauling charge per hundredweight decreases.

Table 5

Average Hauling Charges, by Size Range and State, for May 2021

(Dollars per cwt.)

Size Range	Illinois	Iowa	Michigan	Minnesota	North Dakota	South Dakota	Wisconsin	Average
Up to 49,999	1.3729	1.1166	1.1539	0.6492	R	1.5909	0.7877	**0.7934**
50,000 to 99,999	0.8603	0.8963	1.1539	0.4169	--	1.0362	0.4444	**0.4927**
100,000 to 249,999	0.7795	0.7529	1.1539	0.3425	0.9886	0.7720	0.3675	**0.4252**
250,000 to 399,999	0.8388	0.6016	R	0.2711	--	0.7848	0.4048	**0.4303**
400,000 to 599,999	0.8319	0.6479	1.1647	0.2749	--	0.5707	0.3873	**0.4330**
600,000 to 999,999	0.9321	0.5879	R	0.3146	--	0.5269	0.3282	**0.3825**
1,000,000 to 1,499,999	0.6877	0.5270	R	0.2985	--	0.3322	0.3016	**0.3432**
1,500,000 to 2,499,999	0.9042	0.4657	--	0.2610	R	0.3909	0.2772	**0.3296**
2,500,000 to 4,999,999	--	0.2981	R	0.2673	0.6238	0.3609	0.1841	**0.2316**
5,000,000 or more	R	0.1773	--	0.2222	--	0.1090	0.2322	**0.2031**
Average	**0.7659**	**0.4434**	**0.6237**	**0.2734**	**0.6892**	**0.2226**	**0.2979**	**0.3230**

R = Restricted, fewer than three producers. -- No producers.

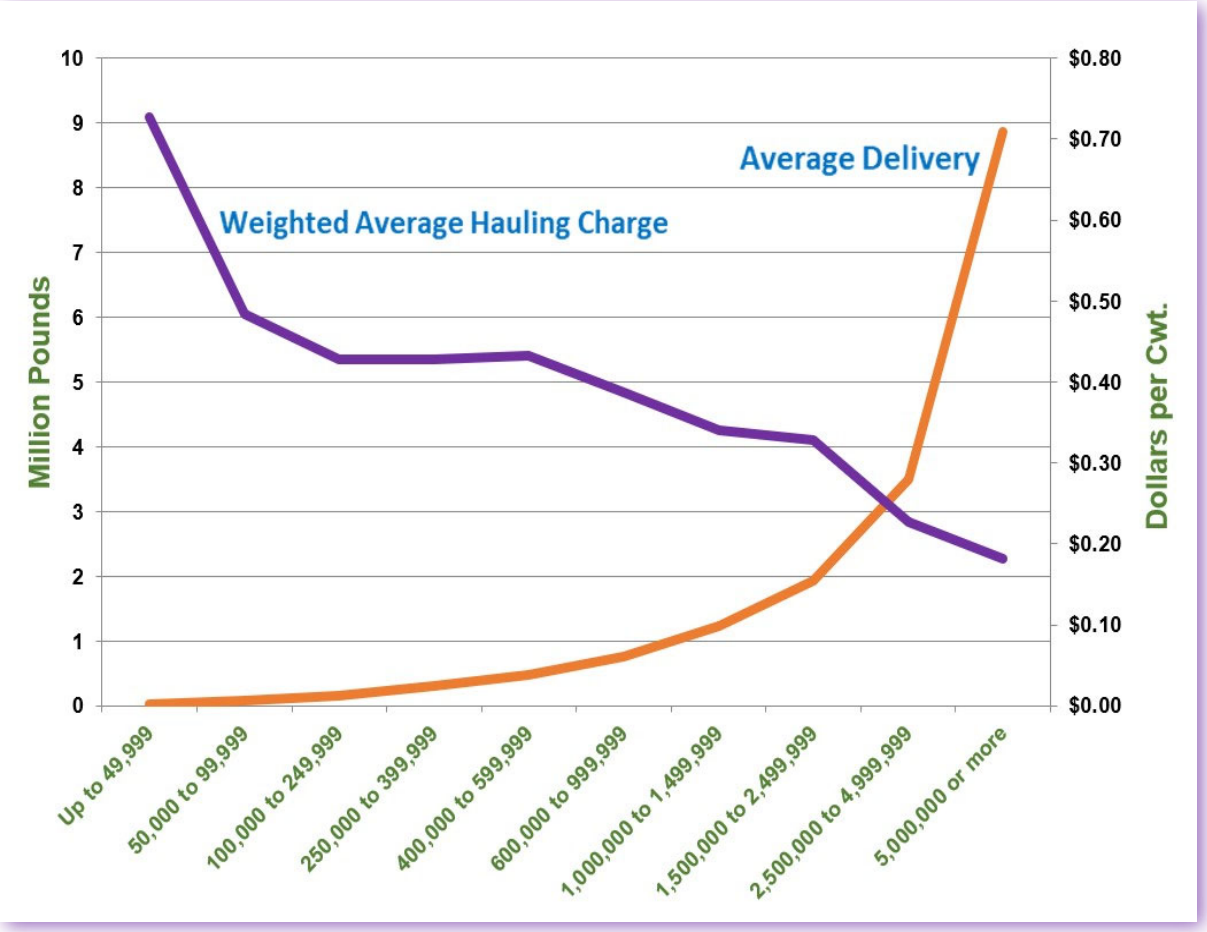
The study acknowledges that there are several major factors causing differences in hauling charges between individual producer sizes. The most obvious factor responsible for influencing the producer's hauling rate per hundredweight, by herd size range, is that many Upper Midwest handlers use a fixed hauling charge, regardless of the volume of milk the particular producer is marketing. Therefore, as one of these producer's milk production increases, the hauling charge per hundredweight will automatically decrease. This increase / decrease relationship is apparent when examining most of the data in Table 5.

Further, this study finds that 80.2% of the producer milk is procured from Minnesota and Wisconsin. The study also finds that these two states have more small dairy producers. Many of these producers are generally located within the vicinity of multiple milk processors.

Therefore, these producers will apparently pay for shorter hauling distances, and their hauling charges on a per hundredweight basis, therefore, are going to be less than similar size producers located in other parts of the market's procurement area. Chart 3 shows the average hauling charges, by size range, for all producer milk associated with the market for May 2021.

Chart 3

Producer Delivery versus Average Hauling Charges for May 2021



As mentioned above, one factor that contributes to varying hauling rate charges is the dairy producer's location to the market, or those areas possessing strong procurement competition among fluid dairy processors and/or cheese manufacturing plants. This factor is quite noticeable in the milkshed areas found in Minnesota and Wisconsin. The study finds that lower hauling charges in these areas reflect strong procurement competition accompanied by shorter hauling distances between dairy farm operations and dairy manufacturing plants.

Average Milk Hauling Charges by State and County

In the Appendix is a list of average hauling charges by State and County. The counties with the highest average hauling charges were mainly located in northern Iowa and North Dakota. The study acknowledges that many of these counties lack multiple dairy plant operators and/or ample local competition for milk procurement. The dairy producers and plant operations found in these semi-remote areas are geographically more spread-out compared to many dairy producers and plant operations in other counties within the marketing area. The added distance between these farms and plants raises the actual transportation cost for moving their milk to market. As mentioned above, the vast majority of handlers on this market charge producers a flat hauling value, regardless of the size or volume of milk being marketed. Therefore, the lower the producer's milk production, the higher the average hauling charge on a per hundredweight basis. This study finds that many of these semi-remote counties do in fact lack a couple of these "large dairy farm" operations that would otherwise have decreased the county's average hauling rate considerably. Many of these smaller farms were located in these more remote counties possessing lower populations.

Many of the counties that had the lowest average hauling charges are geographically located in close proximity to large Class I fluid markets. Most of the counties with the lowest average hauling charges were found in areas with large numbers of dairy farm operations and/or within close proximity to multiple competing dairy manufacturers. Most of the counties with the lowest average hauling charges had several large dairy farm operations that helped to reduce the county's average hauling rate considerably.

Analysis of Producers with Zero Milk Hauling Charges

A small percentage of producers on Federal Order 30 have zero hauling charges listed in handlers' payroll records. Reasons for this lack of deduction include use of waiving the hauling charge as a milk procurement tool, hauling for the producer may be self-funded separate from the handler, or the handler may pay for the hauling via a third-party hauler that is not reflected in the payroll records submitted to this office. Substantial anecdotal evidence indicates that the latter two situations mentioned account for nearly all the zero hauling deductions.

Tables 6 and 7 indicate that the producers with zero hauling charges are spread among all the size categories with more producers not paying hauling in the more plentiful small size categories.

The tables also indicate that more farms are charged no hauling in states with more dairy farms such as in Minnesota and Wisconsin. The overall average producer delivery for zero hauling charge producers greatly exceeds that of the larger dataset as shown in Table 3.

Table 6

Producers with Zero Hauling Charges, by Size Range, for May 2021

State	Production	Number of Farms	Producer Average Monthly Delivery
	(pounds)		(pounds)
Up to 49,999	3,607,012	166	21,729
50,000 to 99,999	6,261,313	87	71,969
100,000 to 249,999	10,643,307	68	156,519
250,000 to 399,999	4,491,913	14	320,851
400,000 to 599,999	6,196,485	12	516,374
600,000 to 999,999	23,126,320	30	770,877
1,000,000 to 1,499,999	40,295,264	32	1,259,227
1,500,000 to 2,499,999	74,559,465	38	1,962,091
2,500,000 to 4,999,999	177,996,376	49	3,632,579
5,000,000 or more	396,465,812	42	9,439,662
Total	**743,643,267**	**538**	**1,382,237**

Table 7

Producers with Zero Hauling Charges, by State, for May 2021

State	Production	Number of Farms	Producer Average Monthly Delivery
	(pounds)		(pounds)
Illinois	12,189,391	11	1,108,126
Iowa	68,621,615	27	2,541,541
Minnesota	135,740,067	137	990,803
South Dakota	103,876,624	20	5,193,831
Michigan UP, North Dakota, and Wisconsin	423,215,570	343	1,233,865
Total	**743,643,267**	**538**	**1,382,237**

Effects of Zero Hauling Charges on Order-Wide Data

The dairy farms producing milk for which there is no deduction on the producer payroll accounted for 743,643,267 pounds in May 2021. Recalculating the weighted average hauling charges, for the order as a whole, entails dividing the total hauling charges by the production on the order, less the production of the dairy farms with zero hauling charge. This recalculation is **$10,021,469.89 / 2,359,095,821 * 100 = $0.4248**. The weighted average hauling charge per hundredweight increases from $0.3230 to $0.4248.

This procedure is repeated in Table 8 and Table 9 for the weighted average hauling charges, by scale and by state, using data from Tables 6 and 7.

Table 8

Average Hauling Charges, by Size Range, with Zero Charges Removed, for May 2021

Size Range	Total Hauling Charges	Production	Production Without Zeros	Weighted Average Charges Without Zeros
	($)	(pounds)	(pounds)	($ per cwt.)
Up to 49,999	283,731.20	38,989,026	35,382,014	0.8019
50,000 to 99,999	591,032.70	122,084,746	115,823,433	0.5103
100,000 to 249,999	1,597,281.08	373,296,070	362,652,763	0.4404
250,000 to 399,999	947,411.44	221,193,345	216,701,432	0.4372
400,000 to 599,999	939,792.33	217,390,278	211,193,793	0.4450
600,000 to 999,999	1,162,944.47	300,022,137	276,895,817	0.4200
1,000,000 to 1,499,999	873,809.52	256,831,094	216,535,830	0.4035
1,500,000 to 2,499,999	1,217,528.70	370,536,978	295,977,513	0.4114
2,500,000 to 4,999,999	1,084,633.86	476,148,423	298,152,047	0.3638
5,000,000 or more	1,323,303.59	726,246,991	329,781,179	0.4013
Total	**10,021,468.89**	**3,102,739,088**	**2,359,095,821**	**0.4248**

Table 9

Average Hauling Charges, by State, with Zero Charges Removed, for May 2021

State	Total Hauling Charges	Production	Production Without Zeros	Weighted Average Charges Without Zeros
	($)	(pounds)	(pounds)	($ per cwt.)
Illinois	901,411.61	117,691,708	105,502,317	0.8544
Iowa	1,378,483.01	310,901,158	242,279,543	0.5690
Minnesota	2,128,130.41	778,285,298	642,545,231	0.3312
South Dakota	361,514.78	162,414,269	58,537,645	0.6176
Michigan UP, North Dakota, and Wisconsin	5,251,929.02	1,733,446,655	1,310,231,085	0.4008
Total	**10,021,468.89**	**3,102,739,088**	**2,359,095,821**	**0.4248**

Summary

The average hauling distance to the point of delivery is normally highest in perimeter, remote and / or isolated counties. In many instances, the added cost required for hauling milk in these areas, combined with a lack of competition among milk procuring handlers, results in an increase in the average hauling charges. On the other hand, counties with the lowest average hauling charges tend to be located in areas with relatively high concentrations of dairy farms, combined with an adequate supply of milk procuring handlers.

This study revealed that a majority of handlers participating in the Upper Midwest Marketing Order charge their producers a flat hauling value, regardless of the producer's size or volume of milk being marketed. In each of these cases where the handler charges a flat rate, the hauling charge per hundredweight declines as the producer's milk volume increases. A specific county's average hauling charge can be greatly influenced by the county's composition of farm sizes.

Weighted average hauling charges are lowest for larger producers in states with a high concentration of milk processors and population centers. Hauling charges are highest for small producers at increased distances to processors and the effect is amplified if the concentration of farms is lower. These effects lead to larger charges for farmers in North Dakota, South Dakota, the Upper Peninsula of Michigan, and the distant counties in Minnesota and Wisconsin. Lastly, the weighted average hauling charges for Federal Order 30 show handlers passed on little of the recent changes in fuel costs to farmers.

Appendix

Upper Midwest Order Reported Payroll Average Hauling Charges, by State and County, for May 2021

State	County	Simple Average Hauling Charges	Weighted Average Hauling Charges
		---------- (Dollars Per Cwt.) ----------	
Illinois	Adams	0.7870	0.5546
	Bond	0.8631	1.0002
	Boone	0.6331	0.7427
	Bureau	R	R
	Carroll	R	R
	Champaign	R	R
	Clark	R	R
	Clay	R	R
	Clinton	0.8454	0.9706
	Crawford	R	R
	Cumberland	0.7669	0.7529
	De Kalb	0.6414	0.7292
	Douglas	0.7554	0.7775
	Effingham	0.7622	0.7683
	Fayette	0.8429	0.8067
	Franklin	R	R
	Fulton	R	R
	Hancock	R	R
	Iroquois	R	R
	Jackson	1.1511	0.8355
	Jasper	0.7628	0.7465
	Jefferson	R	R
	Jo Daviess	0.6670	0.4470
	Kane	R	R
	Kendall	R	R
	La Salle	R	R
	Livingston	1.3916	1.1623
	Logan	R	R
	Macoupin	R	R
	Madison	0.7192	0.7105
	Marion	R	R
	Marshall	R	R
	McHenry	0.8017	0.7795
	McLean	R	R
	Monroe	1.4757	1.4683
	Montgomery	0.8226	0.7857
	Moultrie	1.0185	0.9954

Appendix

Upper Midwest Order Reported Payroll Average Hauling Charges, by State and County, for May 2021

State	County	Simple Average Hauling Charges	Weighted Average Hauling Charges
		---------- (Dollars Per Cwt.) ----------	
Illinois (continued)			
	Ogle	0.6040	0.5722
	Perry	R	R
	Piatt	R	R
	Pike	R	R
	Randolph	1.1162	1.1338
	Richland	0.8547	0.7717
	Rock Island	0.4793	0.7635
	Shelby	R	R
	St. Clair	R	R
	Stephenson	0.7303	0.6022
	Tazewell	0.9931	0.9288
	Washington	1.0710	1.1306
	Wayne	R	R
	Whiteside	1.6506	1.1748
	Will	1.7296	1.7296
	Winnebago	0.6873	0.5986
Iowa	Adair	R	R
	Allamakee	0.7330	0.6630
	Benton	R	R
	Black Hawk	0.6559	0.5305
	Bremer	0.9277	0.4629
	Buchanan	1.0839	0.8387
	Butler	0.7994	0.6737
	Cedar	R	R
	Cerro Gordo	R	R
	Cherokee	R	R
	Chickasaw	0.9434	0.9105
	Clarke	R	R
	Clay	R	R
	Clayton	0.6323	0.4440
	Clinton	0.9065	0.4395
	Davis	0.6065	0.7855
	Delaware	0.6930	0.6037
	Des Moines	R	R
	Dubuque	0.6621	0.5784

Appendix

Upper Midwest Order Reported Payroll Average Hauling Charges, by State and County, for May 2021

State	County	Simple Average Hauling Charges	Weighted Average Hauling Charges
		---------- (Dollars Per Cwt.) ----------	
Iowa (continued)			
	Emmet	R	R
	Fayette	0.6937	0.6092
	Floyd	0.9765	0.9740
	Franklin	R	R
	Grundy	R	R
	Guthrie	R	R
	Howard	0.9865	0.9006
	Humboldt	R	R
	Ida	R	R
	Iowa	R	R
	Jackson	0.9058	0.6979
	Jasper	1.6966	0.9894
	Johnson	0.7597	1.0518
	Jones	0.7390	0.5075
	Kossuth	R	R
	Lee	0.7211	0.7138
	Linn	0.7544	0.6787
	Lyon	0.5391	0.3560
	Mahaska	R	R
	Marion	R	R
	Marshall	R	R
	Mitchell	0.9960	0.8238
	Montgomery	R	R
	Muscatine	R	R
	O'Brien	0.3191	0.1484
	Osceola	0.3670	0.1614
	Palo Alto	R	R
	Plymouth	R	R
	Pocahontas	R	R
	Pottawattamie	R	R
	Sac	R	R
	Scott	1.0263	0.8741
	Shelby	R	R
	Sioux	0.3980	0.2690
	Story	R	R

Appendix

Upper Midwest Order Reported Payroll Average Hauling Charges, by State and County, for May 2021

State	County	Simple Average Hauling Charges	Weighted Average Hauling Charges
		---------- (Dollars Per Cwt.) ----------	
Iowa (continued)			
	Tama	R	R
	Van Buren	0.8621	0.8523
	Washington	0.3000	0.6276
	Wayne	R	R
	Winnebago	R	R
	Winneshiek	0.8669	0.7362
	Worth	0.9262	0.8494
Michigan	Delta	1.1539	1.1539
	Dickinson	1.1596	1.1644
	Menominee	1.0448	0.5534
Minnesota	Aitkin	R	R
	Becker	0.3437	0.1929
	Beltrami	R	R
	Benton	0.3187	0.3694
	Blue Earth	0.6194	0.4340
	Brown	0.2080	0.1861
	Carlton	0.6331	0.5743
	Carver	0.2632	0.2367
	Cass	0.7702	0.7384
	Chippewa	R	R
	Chisago	0.4537	0.3611
	Clay	0.2634	0.1291
	Cottonwood	R	R
	Crow Wing	0.3483	0.2246
	Dakota	0.2260	0.1446
	Dodge	0.3694	0.1714
	Douglas	0.3396	0.2269
	Faribault	0.5846	0.0893
	Fillmore	0.8001	0.6506
	Freeborn	0.5315	0.2355
	Goodhue	0.3887	0.2249
	Grant	R	R
	Hennepin	0.1401	0.1350
	Houston	0.7476	0.6213

Appendix

Upper Midwest Order Reported Payroll Average Hauling Charges, by State and County, for May 2021

State	County	Simple Average Hauling Charges	Weighted Average Hauling Charges
		---------- (Dollars Per Cwt.) ----------	
Minnesota (continued)			
	Hubbard	R	R
	Isanti	0.1184	0.1184
	Jackson	R	R
	Kanabec	1.1278	1.0359
	Kandiyohi	0.2478	0.3095
	Koochiching	R	R
	Lac qui Parle	0.1830	0.1320
	Le Sueur	0.3139	0.0372
	Lincoln	0.4892	0.3800
	Lyon	0.6509	0.6789
	Mahnomen	0.2837	0.1641
	Marshall	R	R
	McLeod	0.3686	0.1576
	Meeker	0.2977	0.3542
	Mille Lacs	0.3832	0.3731
	Morrison	0.3292	0.3382
	Mower	0.9737	0.5032
	Murray	0.7444	0.5963
	Nicollet	0.1962	0.0944
	Nobles	0.4959	0.3907
	Norman	R	R
	Olmsted	0.4204	0.3699
	Otter Tail	0.4669	0.2602
	Pennington	R	R
	Pine	0.6968	0.4108
	Pipestone	0.4806	0.1787
	Polk	1.3707	0.7824
	Pope	0.4633	0.4603
	Ramsey	R	R
	Red Lake	1.0550	0.9628
	Redwood	0.1913	0.2278
	Renville	0.2867	0.1676
	Rice	0.3962	0.4396
	Rock	0.6352	0.6480
	Roseau	1.5063	1.4507
	Scott	0.2968	0.1539
	Sherburne	0.4254	0.3270

Appendix

Upper Midwest Order Reported Payroll Average Hauling Charges, by State and County, for May 2021

State	County	Simple Average Hauling Charges	Weighted Average Hauling Charges
		---------- (Dollars Per Cwt.) ----------	
Minnesota (continued)			
	Sibley	0.3146	0.1536
	St. Louis	R	R
	Stearns	0.3184	0.2593
	Steele	0.3087	0.2361
	Stevens	0.2295	0.0785
	Swift	0.1092	0.1211
	Todd	0.4028	0.3371
	Traverse	R	R
	Wabasha	0.2994	0.1463
	Wadena	0.3682	0.3235
	Waseca	0.5238	0.4914
	Washington	0.5071	0.2454
	Watonwan	R	R
	Winona	0.3943	0.3288
	Wright	0.4000	0.2439
	Yellow Medicine	0.6150	0.2303
North Dakota			
	Cass	R	R
	Foster	R	R
	Morton	R	R
	Nelson	R	R
	Ransom	R	R
	Sargent	R	R
	Stark	R	R
	Walsh	R	R
South Dakota			
	Beadle	R	R
	Bon Homme	R	R
	Brookings	0.7598	0.3509
	Brown	R	R
	Brule	R	R
	Charles Mix	1.1358	1.0753
	Clark	R	R
	Codington	0.7842	0.6489
	Davison	1.0727	1.0758

Appendix

Upper Midwest Order Reported Payroll Average Hauling Charges, by State and County, for May 2021

State	County	Simple Average Hauling Charges	Weighted Average Hauling Charges
		---------- (Dollars Per Cwt.) ----------	
South Dakota (continued)			
	Day	R	R
	Deuel	1.0967	0.9913
	Douglas	1.3774	1.1674
	Edmunds	R	R
	Faulk	R	R
	Grant	R	R
	Gregory	R	R
	Hamlin	0.5351	0.0259
	Hand	R	R
	Hanson	1.0458	0.8223
	Hutchinson	0.8626	0.3612
	Kingsbury	0.6625	0.4660
	Lake	0.5206	0.3636
	Lincoln	0.5671	0.0469
	Marshall	R	R
	McCook	0.5866	0.1145
	Minnehaha	0.5136	0.1548
	Moody	R	R
	Roberts	R	R
	Sanborn	R	R
	Spink	R	R
	Tripp	R	R
	Turner	0.5004	0.0996
	Union	R	R
	Yankton	R	R
Wisconsin	Adams	0.3252	0.0090
	Ashland	0.9612	0.8227
	Barron	0.5070	0.1980
	Bayfield	0.6388	0.5002
	Brown	0.4123	0.3679
	Buffalo	0.4496	0.2197
	Burnett	0.6249	0.2472
	Calumet	0.3332	0.3637
	Chippewa	0.4011	0.2463

Appendix

Upper Midwest Order Reported Payroll Average Hauling Charges, by State and County, for May 2021

State	County	Simple Average Hauling Charges	Weighted Average Hauling Charges
		---------- (Dollars Per Cwt.) ----------	
Wisconsin (continued)			
	Clark	0.2249	0.1031
	Columbia	0.7705	0.4637
	Crawford	0.8710	0.5551
	Dane	0.5928	0.4551
	Dodge	0.5846	0.5049
	Door	0.4750	0.0906
	Douglas	R	R
	Dunn	0.5157	0.4896
	Eau Claire	0.4288	0.2381
	Florence	R	R
	Fond du Lac	0.3515	0.2525
	Grant	0.6036	0.4644
	Green	0.4654	0.3361
	Green Lake	0.4107	0.1077
	Iowa	0.5065	0.4152
	Iron	R	R
	Jackson	0.2578	0.1925
	Jefferson	0.7984	0.4709
	Juneau	0.6295	0.5786
	Kenosha	1.4877	1.3864
	Kewaunee	0.4969	0.0806
	La Crosse	0.4646	0.3687
	LaFayette	0.4245	0.3734
	Langlade	0.4424	0.1481
	Lincoln	0.3584	0.1826
	Manitowoc	0.3962	0.2513
	Marathon	0.2633	0.0991
	Marinette	0.4240	0.3951
	Marquette	0.4880	0.1126
	Monroe	0.6988	0.6708
	Oconto	0.3161	0.2776
	Outagamie	0.4761	0.1465
	Ozaukee	0.5022	0.2602
	Pepin	0.2812	0.2145
	Pierce	0.2824	0.2385
	Polk	0.5489	0.2528

Appendix

Upper Midwest Order Reported Payroll Average Hauling Charges, by State and County, for May 2021

State	County	Simple Average Hauling Charges	Weighted Average Hauling Charges
		---------- (Dollars Per Cwt.) ----------	
Wisconsin (continued)			
	Portage	0.3867	0.1097
	Price	0.7687	0.2952
	Racine	1.2976	1.2069
	Richland	0.6260	0.5073
	Rock	0.6748	0.1892
	Rusk	0.6720	0.4984
	Sauk	0.6633	0.5458
	Sawyer	0.4166	0.4162
	Shawano	0.4123	0.1981
	Sheboygan	0.3924	0.4344
	St. Croix	0.2607	0.2528
	Taylor	0.4359	0.2577
	Trempealeau	0.5590	0.2878
	Vernon	0.5846	0.6193
	Walworth	0.7921	0.5714
	Washburn	0.9405	0.2886
	Washington	0.4894	0.3661
	Waukesha	0.9274	1.0500
	Waupaca	0.4603	0.2924
	Waushara	0.2979	0.3916
	Winnebago	0.4630	0.1867
	Wood	0.1492	0.0745

R = Restricted data, counties with fewer than 3 producers delivering to the market.