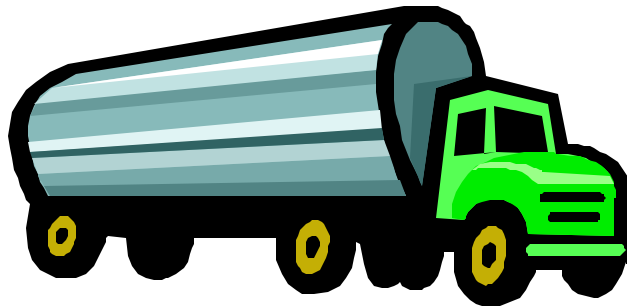


**MILK HAULING CHARGES IN THE
CHICAGO REGIONAL MARKETING AREA
MAY 1999**



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ABSTRACT

This study investigated the milk hauling charges, to the first point of delivery, in May 1999 for approximately 90 percent of the producers pooled on the Chicago Regional Marketing Area. There were 12,057 producers reported participating in the May 1999 market pool. The data for hauling charges and milk production were obtained from handlers who had submitted computer-automated producer payrolls to the Market Administrator's office. Producer comparisons were made between the producer's milk volume and farm location using averages. The producers whose data were not included in this study were briefly examined and it was determined that their hauling charges closely reflected the producers and data actually included in this analysis. For the purposes of this analysis, unless otherwise specified, the "average" hauling rates and/or charges are weighted averages. Major findings and conclusions for the producers evaluated in this study for May 1999, are as follows:

- 1) The average hauling charge for producers participating on the Chicago Regional Marketing Area was 11.1 cents per hundredweight.
- 2) For the states from which the producer milk was received into this market, Illinois, Indiana, Iowa, Michigan, Minnesota and Wisconsin, the hauling charges per hundredweight averaged 8.8, 10.0, 9.5, 15.8, 12.6 and 11.2 cents respectively.
- 3) In general, the average hauling rate per hundredweight charge decreased as the farm size and milk volume increased.
- 4) Hauling rates were noticeably higher in counties located outside fluid milk shed areas and in counties located the furthest distance from major Class I fluid markets. The highest average hauling charges were found in the perimeter Wisconsin counties of Bayfield, Door, Douglas and Iron. The average hauling charges for each of these counties exceeded 25 cents per hundredweight.
- 5) Some of the lowest hauling charges were found in the Michigan counties of Delta and Dickinson, the Wisconsin counties of Florence, Marquette and Sawyer and in the Illinois counties of Bureau and Carroll. The average hauling charges for each of these counties were found to be less than 6 cents per hundredweight.
- 6) The majority of handlers in the Chicago Regional Marketing Area charge producers a flat hauling value regardless of the volume of milk being marketed. When handlers charge a flat rate, the actual hauling charge per hundredweight declines as the producer's milk volume increases. This study found that a specific county's average hauling charge is greatly influenced by its farm composition regarding farm sizes.
- 7) The data used in this study showed that Wisconsin producers supplied nearly 95% of the milk marketed on this order.

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MILK HAULING CHARGES IN THE CHICAGO REGIONAL MARKETING AREA MAY 1999

Leonard J. Barske¹

I. INTRODUCTION

For May 1999, Chicago Regional Marketing Area bulk milk hauling charges, to the first point of delivery, were examined for more than twelve thousand dairy producers representing approximately 90% of the producer milk on the market. This study included a small number of producers whose milk was not pooled because of unusual price relationships and/or performance requirements. During May 1999, only a small portion of the market's eligible producer milk was not pooled for these reasons. This study also revealed that a small number of the handlers were actually deducting for milk hauling charges on both their advanced and final payments to producers. For feasibility purposes, the data pertaining to those producers, with advanced hauling deductions, were simply excluded from this study. The study's research and analysis did however reveal that the above excluded producers had total hauling charges consistent with the balance of the producers and data used in this analysis.

The hauling charges included in this study consisted of hauling deductions shown on the computerized producer payrolls that had been submitted, by reporting handlers, to the Market Administrator's office. The hauling charges do not necessarily reflect the actual cost of the hauling. In some cases, handlers or cooperatives may have subsidized milk hauling costs or absorbed additional hauling costs as operating expenses. This study broke down and categorized the hauling charges based on state, county and producer size groups.

The month of May 1999 was chosen because it represented high volumes of milk and pooling.

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II. AVERAGE MILK HAULING CHARGES - FOR THE MILK PROCUREMENT AREA AND BY STATE

In May 1999, the Wisconsin average hauling charge for milk pooled on this market was 11.2 cents per hundredweight. This study revealed that Wisconsin's average hauling charge was very similar to the entire Chicago Regional Marketing Area's average hauling charge of 11.1 cents. The average hauling charge for Wisconsin counties ranged between 5 and 36 cents per hundredweight. The Wisconsin producers comprised 95.2% of the producer milk pooled on the Chicago Regional Marketing Area. Illinois, Michigan and Iowa comprised 4.0%, 0.5% and 0.2%, respectively. The portion of milk pooled from producers located in Indiana and Minnesota was found to be minimal.

The average hauling charge for the Chicago Regional Marketing Area in May 1999 was 11.1 cents. (See Table 1.)

Table 1

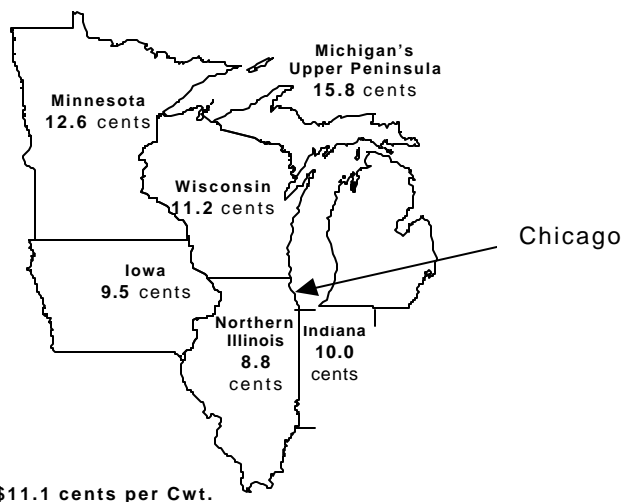
Average Hauling Charge, by State and for the Marketing Area for May 1999

<u>State</u>	<u>Average Hauling Charge</u> (Cents Per Cwt.)
Illinois	8.8
Indiana	10.0
Iowa	9.5
Michigan	15.8
Minnesota	12.6
Wisconsin	11.2
Simple Market Average	11.3
Weighted Market Average	11.1

When examining the average hauling charges by state, the average rate for producers in the Chicago Regional Marketing Area has a tendency to increase as the producer's distance from Chicago, Illinois increases (Chicago is the largest Class I fluid market in this region, see map below).

Figure 1

**Chicago Regional Milk Marketing Area (By State)
Average Hauling Charges (Cents Per Cwt.)
May 1999**



When examining the average hauling charges by state, the producers located in Illinois had the lowest average hauling charge of any of the six states with milk pooled on the market. The average hauling charge to producers located in the state of Illinois was 8.8 cents per hundred pounds of milk marketed. The average hauling charge for Illinois was 2.3 cents below the market average. The Illinois producers were all located in the northern portion of the state and many of these producers were in close proximity of a large fluid milk market (Class I sales in the Chicago and Rockford areas).

Producers located in Michigan had the highest average hauling charge of the six states with producers whose milk was pooled on the market. The average hauling charge to producers located in the state of Michigan was 15.8 cents per hundred pounds of milk marketed. The average hauling charge for Michigan was 4.7 cents above the market average. The

Michigan producers pooled on the Chicago Regional Marketing Area were located in the Upper Peninsula. The study found that Michigan's average hauling charge was strongly influenced by abnormally high hauling charges assessed to those dairy farmers located in Menominee County. This county is located on the south bank of Lake Superior. The farmers in this county are not located in close proximity to any major Class I markets or are they close to multiple and competing dairy manufacturing operations. The increase in the cost of hauling to get the milk to market and the lack of competition explain the higher hauling charges in this county.

III. AVERAGE MILK HAULING CHARGES BY SIZE RANGE OF PRODUCER DELIVERY

Table 2 shows the individual size category and its weighted average milk hauling charge for producers who participated on the Chicago Regional Marketing Area's pool in May 1999.

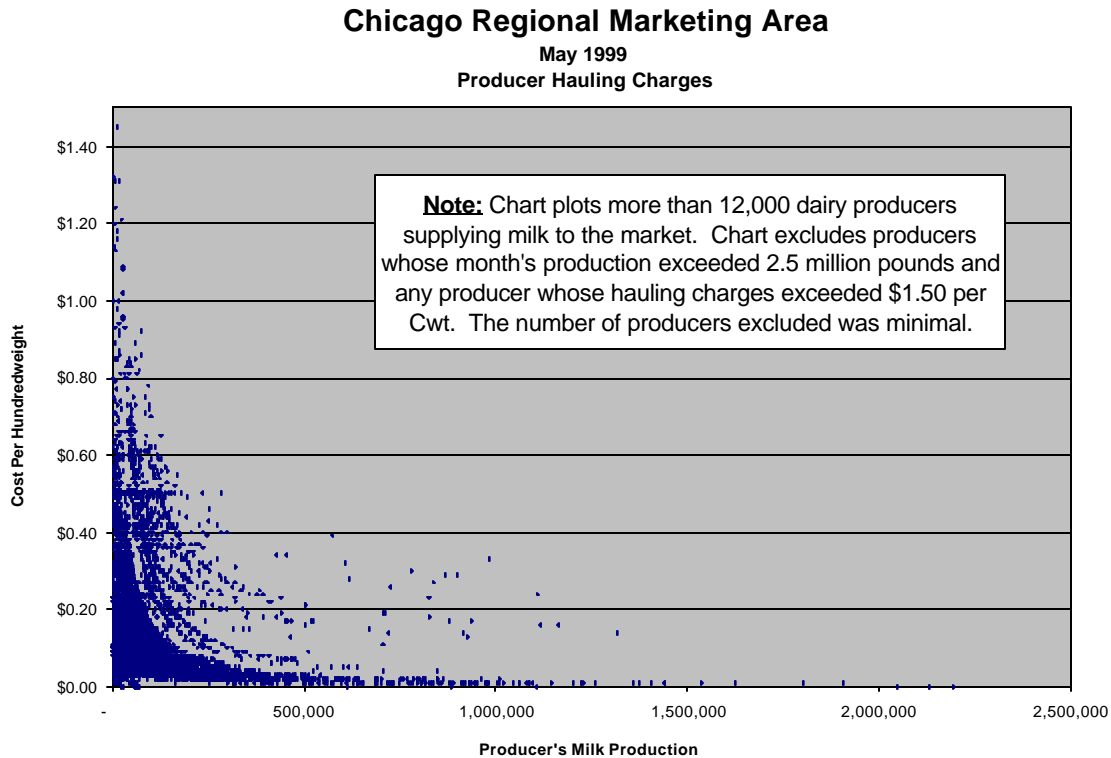
Size Range		Average Hauling Charge for May 1999						
Equal to or more than	Less Than	IL	IN	IA	MI	MN	WI	Market Average
------(Pounds)-----		----- (Cents Per Cwt.) -----						
-	20,000	22.7	R	24.8	R	R	23.1	23.1
20,000	30,000	19.2	R	14.6	R	R	23.8	23.7
30,000	50,000	15.6	R	17.4	38.8	27.8	19.5	18.4
50,000	70,000	12.2	R	14.9	16.0	20.5	16.0	15.9
70,000	100,000	9.5	R	15.3	15.3	14.7	13.3	12.2
100,000	150,000	7.3	R	8.1	22.9	10.1	11.1	11.0
150,000	250,000	5.8	R	6.2	17.7	R	8.9	8.9
250,000	-	2.4	R	R	1.7	R	5.5	5.4
Weighted Average		8.8	10.0	9.5	15.8	12.6	11.2	11.1

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

One major factor in explaining the differences in hauling charges in producer size ranges is that the vast majority of handlers participating in the market charge a fixed hauling dollar value to their producers regardless of the volume of milk marketed. Therefore, as the producer's production increases, the average hauling charge per hundredweight decreases.

This factor is reflected in the data in Table 2 and in the producer data plotted on the following chart.

Figure 2



A major factor that contributes to varying hauling rate charges by producer size range is most of the largest dairy farm operations are located in areas with strong procurement competition. These areas with strong procurement competition also reflect shorter hauling distances between dairy farm operations and dairy manufacturing plants.

IV. AVERAGE MILK HAULING CHARGES BY COUNTY

Table 3 (page 6) details the average milk hauling charge by county for the Chicago Regional Marketing Area for May 1999. The source of the data in Table 3 represents dairy producers located in over one hundred counties and six states.

Table 3**Chicago Regional Order Milk Procurement Area Average Hauling Charge by County
May 1999**

State	County	Average Hauling Charge (Cents Per Cwt.)
Illinois	Boone	10.4
	Bureau	5.0
	Carroll	5.6
	De Kalb	7.1
	Jo Daviess	8.5
	Kane	12.7
	Lake	10.4
	Lee	R
	McHenry	10.7
	Ogle	12.8
	Stark	R
	Stephenson	8.2
	Whiteside	12.2
	Will	R
Winnebago	7.3	
Indiana	Carroll	R
	Parke	R
Iowa	Clinton	R
	Dubuque	9.5
	Jackson	9.0
	Jones	R
Michigan	Delta	5.6
	Dickinson	4.4
	Marquette	R
	Menominee	22.0
Minnesota	Aitkin	R
	Chisago	15.5
	Isanti	R
	Kanabec	R
	Olmsted	R
	Pine	12.4

Continued on next page

Table 3

**Chicago Regional Order Milk Procurement Area Average Hauling Charge by County
May 1999**

State	County	Average Hauling Charge (Cents Per Cwt.)
Wisconsin	Adams	9.5
	Ashland	23.6
	Barron	11.1
	Bayfield	26.7
	Brown	12.0
	Buffalo	7.6
	Burnett	14.2
	Calumet	15.1
	Chippewa	10.6
	Clark	7.4
	Columbia	9.7
	Crawford	15.5
	Dane	7.2
	Dodge	10.4
	Door	29.7
	Douglas	30.2
	Dunn	10.5
	Eau Claire	12.8
	Florence	5.7
	Fond Du Lac	8.5
	Forest	10.9
	Grant	11.8
	Green	11.9
	Green Lake	10.0
	Iowa	14.1
	Iron	35.6
	Jackson	12.8
	Jefferson	13.1
	Juneau	12.8
	Kenosha	10.6
Kewaunee	18.6	
La Crosse	13.7	
Lafayette	9.0	
Langlade	6.6	
Lincoln	10.4	

Continued on next page

Table 3**Chicago Regional Order Milk Procurement Area Average Hauling Charge by County
May 1999**

State	County	Average Hauling Charge (Cents Per Cwt.)
Wisconsin	Manitowoc	19.5
	Marathon	7.5
	Marinette	12.4
	Marquette	5.4
	Milwaukee	R
	Monroe	11.4
	Oconto	11.4
	Oneida	R
	Outagamie	7.9
	Ozaukee	6.4
	Pepin	9.2
	Pierce	11.5
	Polk	12.2
	Portage	8.6
	Price	10.1
	Racine	11.7
	Richland	10.5
	Rock	10.4
	Rusk	14.2
	St. Croix	6.4
	Sauk	9.8
	Sawyer	5.2
	Shawano	13.8
	Sheboygan	10.5
	Taylor	9.3
	Trempealeau	10.5
	Vernon	13.1
	Walworth	13.0
	Washburn	15.7
	Washington	12.7
	Waukesha	11.4
Waupaca	10.7	
Waushara	9.3	
Winnebago	10.2	
Wood	8.4	

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

In Table 3, the listed counties with the highest average hauling charges are Ashland, Bayfield, Door, Douglas and Iron of Wisconsin and Menominee of Michigan. The average hauling charge for each of these six counties exceeded 20 cents per hundredweight. On the other hand, the lowest average hauling charges were found in the Illinois counties of Bureau and Carroll, Michigan counties of Delta and Dickinson and Wisconsin counties of Florence, Langlade, Marquette, Ozaukee, St. Croix and Sawyer. The average hauling charges in these ten counties were less than 7 cents per hundredweight.

V. FACTORS CONTRIBUTING TO DIFFERENCES IN THE LEVEL OF HAULING CHARGES

In Table 3, the seven counties with the highest average hauling charges are mainly located in remote northern areas of Wisconsin and Michigan's Upper Peninsula, including Door County, which is nearly surrounded by Lake Michigan. When examining the dairy producers' hauling distance to dairy plant locations, it appears that each of these "semi-remote" counties lack multiple dairy plant operators and ample competition for milk procurement. These semi-remote counties also represent areas of the market with some of the lowest human populations. The study also observed that the dairy producers and plant operations located in these semi-remote areas are geographically more spread out when compared to dairy producers and plant operations in the other counties in the marketing area. The added distance between farms and plants raises the actual transportation cost of moving milk to the market. Another factor that is noticeably absent from these semi-remote counties and included in many of the other counties, is the existence of multiple large-scale dairy farm operations. This study found that 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 his or her average hauling charges on a per hundredweight basis. Most of the semi-remote counties do in fact lack having large dairy farm operations that would otherwise decrease the county's average hauling rate considerably.

In Table 3, of the ten counties with the lowest average hauling charges, only Carroll county in Illinois and Ozaukee and St. Croix counties in Wisconsin are actually geographically located in close proximity to the so called "large Class I fluid markets". However, the

majority of the counties having the lowest average hauling charges do reflect areas having large numbers of dairy farm operations and/or are in close proximity to several competing dairy manufacturers.

This study further investigated the hauling charges and related data in order to identify common factors responsible for the obvious disparity between the average hauling rates. The study especially analyzed those inconsistencies in hauling rates of seemingly similar counties possessing common milk marketing characteristics. For example, the average hauling rate disparity is especially noticeable in the Wisconsin counties of Langlade and Lincoln. These two counties appear very similar in location and market conditions. Both counties had a similar number of dairy farmers pooled on the market, were relatively identical distances from major Class I markets and their producers were surrounded by ample competing cheese manufacturing plants. In fact, the two northern Wisconsin counties even border one another. The only obvious difference between the two counties was that Langlade County's average producer hauling charge was 6.6 cents and Lincoln County's was 10.4 cents per hundredweight. This hauling charge disparity between these two counties was mainly due to the average size of the dairy farm operations in the two counties. The average pounds of production for May 1999 for producers in Langlade County was about 120,000 pounds, whereas, producers in Lincoln County only averaged about 85,000 pounds. As previously pointed out, one major factor that contributes to a county's higher or lower average hauling rate is the presence and/or influence of a handful of so called "large dairy farm" operators. This is very noticeable in the two counties compared above.

The data in Table 4 (page 11) were designed to explain the impact that large dairy producers have on their county's average hauling rate. Table 4 measures the actual impact that the three largest dairy farm operations, located in each of the listed ten counties, have on that specific county's average hauling charge. The first column in Table 4 shows the actual weighted-average hauling charge for the listed county. The second column shows the average hauling charge for the county with all data related to the county's three largest dairy farm operations removed. The third column shows the impact of the three largest dairy farm operators located in each of the counties on their respective county's average hauling charge.

Table 4

**Impact of the Three Largest Dairy Farms on the County's Average Hauling Rate
May 1999**

	<u>County</u>	<u>Average Hauling Charge (Cents Per Cwt.)</u>		
		<u>Actual Rate</u>	<u>3 Farms Removed</u>	<u>Difference</u>
<u>Illinois</u>				
	Bureau	5.0	7.4	+ 2.4
	Carroll	5.6	6.6	+ 1.0
<u>Michigan</u>				
	Delta	5.6	8.7	+ 3.1
	Dickerson	4.4	R	R
<u>Wisconsin</u>				
	Florence	5.7	8.8	+ 3.1
	Langlade	6.6	9.1	+ 2.5
	Marquette	5.4	6.3	+ 0.9
	Ozaukee	6.4	8.3	+ 1.9
	St. Croix	6.4	7.4	+ 1.0
	Sawyer	5.2	9.4	+ 4.2
			Simple Average:	+ 2.2

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

The data in Table 4 addresses the ten counties that had the lowest average hauling rate per hundredweight of all counties included in this study. The ten counties having the lowest average hauling rates averaged 37.5 dairy producers per county and ranged from 4 to 97 dairy producers per county. Table 4 demonstrates the impact of the three largest dairy producers on their respective county. In other words, Table 4 measures the change in the average hauling charge that would have existed had the three largest dairy producers been excluded or if they failed to exist. The research reveals that when removing the data regarding the three largest dairy farm operations, the average hauling rate for the county increases substantially. In this table, the simple average hauling charge per hundredweight, for the ten counties with the lowest average hauling charges, increased by 2.2 cents per hundredweight. This hypothetical scenario revealed that when given this situation, the

hauling rates for these ten counties were much more in line with the main stream of the remaining counties.

IV. SUMMARY

When examining the average hauling charges at the state level, it appears that average hauling charges, for producers in the Chicago Regional Marketing Area, have the tendency to increase as the producer's distance from Chicago, Illinois increases. However, this relationship between the producer's average hauling charge rate and the producer's location to the Class I market is not nearly as noticeable when analyzing the producer data at the county level. Although there may be some merit to producers having a lower hauling charge based on their relationship to Class I markets, this factor is not really apparent nor indicative in most of the counties within the Chicago Regional Marketing Area.

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

The average hauling distance to the point of delivery is normally highest in perimeter, remote and/or isolated counties. The added cost required for hauling milk in these areas, combined with a lack of competition among dairy procuring handlers, usually 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 farm operations combined with an adequate supply of dairy procuring handlers.