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## Minnesota AGRICULTURAL ECONOMIST

## Federal Milk Order Merger: A Means To Improve Marketing Conditions For Minnesota Dairymen

by John Schamper

#### Introduction

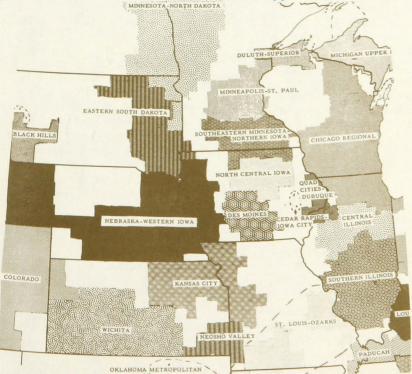
Milk has two general uses: fluid consumption; and production of manufactured products such as cheese, butter, milk powder, and ice cream. In recent years, the market for fluid milk has become increasingly important to Minnesota dairymen.

The market for fluid milk is regulated under Federal Milk Market Orders. These stipulate minimum prices that bottlers must pay producers for Class I (fluid use) milk. When a Federal Order's milk receipts exceed requirements, the excess is diverted to manufacturing uses (Class II). Minimum producer prices for Class II milk are also stipulated by Federal Milk Orders. The price producers receive under an Order is the weighted average price for Class I and Class II products under that Order. This price is the "blend price."

Presently, five Federal Milk Orders have part of their marketing areas in Minnesota. Sixty-two Federal Milk Orders currently exist in the United States. This report discusses 14 Orders that regulate milk sales in Minnesota, Wisconsin, North Dakota, South Dakota, Iowa, Nebraska, Kansas, Missouri, and Illinois.

Many experts believe milk market regulation could be more efficient

#### Figure 1. Federal Milk Order markets in the Upper Midwest.



by consolidating Federal Orders. This report examines the possible merger of 14 Upper Midwestern Federal Orders.

### Causes of broader geographic scope

The market for manufactured milk products has traditionally been national. This has been due to manufactured milk's homogeneity, storability, and ease of transport. In contrast, the market for fluid milk has been local. Milk sold in bottles and cartons must be fresh, and it is relatively costly to transport. Minnesota is one of the largest milk-producing states. But because the state is relatively distant from major fluid milk markets, Minnesota's producers have traditionally relied on markets for manufactured milk. Institutional and technological changes, however, have increased the importance of fluid milk markets to Minnesota dairymen.

## Technological changes in dairy marketing

Bulk farm tanks—Widespread acceptance of farm bulk milk tanks has increased producers' relevant geographic market by lowering milk's handling cost. The cost of transporting milk long distances in cans compares unfavorably with that for bulk.

Trucking—Bulk milk trucks can transport milk from Minnesota to Florida or Texas without loss of quality. Better highways have also reduced the time factor.

Increase in size of milk bottling plants—Technological changes in milk packaging has generally benefited larger-sized plants. Larger bottling plants draw milk supplies

Table 1. Percentage of milk production eligible for the fluid market—1967, 1970-73.

Year											
State	1967	1970	1971	1972	1973						
Percentage											
Minnesota	19	29	33	36	39						
lowa	23	33	35	35	35						
Wisconsin	44	54	56	58	59						
United States	69	74	76	77	78						

from greater distances. Milk produced in different areas can have different taste characteristics. With large milk packaging plants drawing supplies from a large geographic area, and likewise serving retail accounts within a large geographic area, taste characteristics of packaged milk tend to be more uniform. This has increased the demand for milk from Minnesota producers.

### Institutional changes in milk marketing

Retail selling practices—At one time, most fluid milk was delivered to consumers. Currently, most sales are through large chain stores. This practice, together with technological changes in milk packaging, has resulted in fewer but larger milk handlers that receive milk from greater distances.

Producer organizations—Large milk producer cooperatives have emerged in the Upper Midwest. They have further broadened the market for Minnesota milk. These organizations can supply Grade A milk anywhere in the United States. Their ability to coordinate supplies and direct surplus to manufacturing outlets enables them to avoid many problems smaller organizations face in serving distant customers.

Sanitation requirements—Two principal changes in sanitation regulations have affected dairy marketing. The first is greater reciprocity among jurisdictions. For years, milk for fluid use has been subject to sanitation codes. The cost of inspection can be prohibitive unless reciprocity between local and distant sanitation authorities exists.

Better sanitation standards for manufactured milk, together with general use of bulk tanks, has lowered the marginal costs of producing Grade A milk. Professors Cook and Peterson at the University of Wisconsin have estimated Wisconsin farms' additional costs of meeting Grade A sanitation standards at only 14-17 cents per cwt.<sup>1</sup> According to USDA data, the average Minnesota farm price for milk eligible for fluid markets was \$5.51 in 1971. This was compared to \$4.86 per cwt. for manufacturing grade milk, a difference of 51 cents per cwt.<sup>2</sup>

### The results of technological and institutional change: conversion

Conversion from Grade B to Grade A milk is virtually complete in the large milk-producing states of the east, especially New York and Pennsylvania. Grade A milk accounts for more than 80 percent of production in the large-producing states of California, Michigan, and Ohio. Production of Grade B milk continues to be concentrated in Minnesota, Wisconsin, and Iowa. Table 1 indicates the steady progress toward conversion to Grade A or fluid grade milk in these states.

Minnesota, Wisconsin, and Iowa's total Grade B milk production was 17.2 billion pounds in 1972. This was 62 percent of the U.S. manufacturing grade production. Indications are that it is only a matter of time before this production is converted to fluid grade. As it is converted, major changes will be needed in the institutions that market and regulate the sale of fluid milk.

<sup>1</sup>Cook, Hugh L., and Peterson, G. A. "Size and Costs of Production on Wisconsin Farms Producing Grade A or Grade B Milk," Staff Paper Series No. 52, Sept. of Ag. Economics, University of Wisconsin-Extension, Madison, October 1972, p. 10.

<sup>2</sup>Minnesota Agricultural Statistics, 1972. USDA-Minn. Dept. of Agriculture, p. 80, March 1972.

## The difficulty of achieving a stable equilibrium in fluid milk markets

Instability has historically been a problem in fluid milk markets. This has been due to the characteristics of milk production and because of the final market. Milk is perishable; it must be marketed soon after production. Any market's milk producers greatly exceed its number of milk bottlers or handlers. Milk production, moreover, cannot readily be adjusted without loss to producers. Production requires long term decisions by producers who invest in dairy cattle and capital equipment. Production is also somewhat seasonal. Producers have generally felt these conditions give milk handlers a bargaining advantage in unregulated markets.

The retail market for fluid milk has its own variations, with demand generally falling off in the summer. Finally, the market for manufactured dairy products is essentially national. Manufactured products can be stored and transported at a low cost relative to their value. The manufactured products market enjoys little of the geographic isolation that exists for the fluid milk markets.

In unregulated markets, these factors combine to create an equity problem. Variations in production and demand impose a burden on producers and handlers. This is because surplus supplies must be used for lower valued manufactured products. Producers incur additional costs in meeting Grade A production standards. The variable needs of a fluid milk market and the need for assurance of an adequate supply at all times create costs.

Because of these conditions, unregulated markets may experience an unending disequilibrium. Each handler may keep reserve milk supplies at the minimum. Then, his profits can be improved by paying the prevailing price for raw milk and selling all milk in the higher-valued fluid market. To accomplish this, he may refuse delivery from some producers from time to time.

Two main sources of dissatisfaction arose. The first concerned individual producers and handlers. The market yielded no easy solution to who should carry surplus supplies. At any time, individual producers could be cut off from the fluid market and forced onto the lower-

priced manufactured products market. Individual handlers could suffer inequity by carrying more than their share of excess supplies.

A second cause for producers' dissatisfaction rose from the general level of market prices. Since producers could be easily separated from the fluid market whenever surplus supplies existed and since their supplies were uninterruptable, they felt they were in an uneven bargaining situation.

### Regulation through producer associations

The first producer associations were developed in the 19th century. Organized to improve the bargaining position of producers serving individual markets, these associations developed two market tools: classified pricing; and pooling of receipts.

Classified pricing (pricing milk according to use) recognized the different characteristics of the fluid market and the manufactured products market. Prices for manufactured products were determined by national supply and demand, and milk used for this purpose was priced accordingly. Local markets for fluid milk were protected by distance, and this milk was assigned a higher price. This was so producers could recover the additional production costs, the costs of serving the variable needs of the fluid market, and to enhance incomes.

The second major tool, pooling, was accomplished by returning a blend price to producers. This price reflected a common utilization rate between manufacturing and fluid use to all producers serving the market. Producers received this common blend price regardless of how their individual milk supplies were utilized.

Producer marketing associations (cooperatives) had varying degrees of success. They operated under two principal disadvantages: (1) pricing and pooling lacked the force of law, so handlers or producers could operate without regard to the agreements associations made with some handlers; (2) and not entirely independent of the first disadvantage, there was a lack of control over unnecessary surpluses. Producers more distant from the fluid market could be attracted to it because of favorable prices. This set up a natural conflict between nearby producers who sometimes felt they had an exclusive right to the market and distant producers who felt they could market their milk wherever it yielded the best price.

The Great Depression destroyed most cooperative agreements. In the chaotic market that followed, pressure built for a legal framework to resolve the economic issues of milk marketing. The result was the Federal Order Program.

### The Federal Order Program

The Federal Milk Order Program has been a highly popular means to regulate fluid milk markets. The first Order, St. Louis, was created in 1936. By 1972, the program had expanded to 62 Orders that regulated 78 percent of the fluid grade milk sold by producers.

Federal Milk Orders provide four classifications: (1) definition of marketing area; (2) classified pricing; (3) pooling provisions; and (4) performance requirements.

Handlers having retail sales within a particular geographic area are under the provisions of that area's Federal Milk Order. The USDA generally defines an Order's marketing area as where "the conditions of supply and demand are reasonably homogeneous." Sometimes this is expressed as an area in which "the same handlers compete for the same retail sales."

Classified pricing is one Federal Order provision borrowed in concept from pre-Order times. Prices for various uses of milk are precisely defined with milk for fluid use priced highest. This puts all milk handlers in the market on an equal basis for raw milk costs. Most orders allow for pricing adjustments based on handlers' locations.

Federal orders can be defined with either individual handler or marketwide pools. Individual handler pools have been increasingly less popular in recent years; only a few remain.

Under marketwide pooling, all producers pooled on an order receive the same blend price, except for location adjustments. The blend price in a Federal Order depends on three factors: (1) the basic manufacturing price; (2) the Class I price, which is set a specific differential above the basic manufacturing price; and (3) the utilization rate, which is the percentage of Class I milk pooled on the order.

The blend price to an Order's producers—with a basic manufacturing milk price of \$6.00 per cwt. of milk, a Class I differential of \$2.00 per cwt., and an 80 percent utilization rate—would be \$7.60. This is the weighted average of the two component prices. In the few remaining individual handler pools, producer blend prices are determined by the Class I prices under the Order, the basic manufacturing price, and the utilization rate associated with the producer's handler.

Performance provisions prevent exploitation of the Orders. Handlers pooled under Federal Orders have an advantage in procuring milk supplies over nonpooled plants. Pooled plants pay the weighted average of the basic manufacturing milk price and a Class I price; plants not pooled are competitively restrained from paying much more than the basic manufacturing price.

Without performance provisions, operators interested in only manufacturing operations could secure the advantages of an Order in procuring milk supplies without serving the fluid market. Performance provisions usually require that plants use a minimum percentage of milk to supply the fluid market.

Federal Orders have successfully stabilized fluid milk markets through equating raw milk costs to bottlers and insuring an equitable distribution of the surplus. Federal Orders may not, however, achieve these results without attracting surplus supplies.

A Federal Order's Class I utilization rate is that percentage of pooled supplies used for fluid purposes. Orders should have a certain amount of surplus—15-20 percent of pooled supplies on a yearly basis—to accommodate fluctuations in production and demand. Therefore, an Order with a Class I utilization rate of 80-85 percent is not considered to have unnecessary surplus.

Milk producers may, however, find it advantageous to market milk

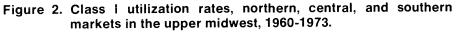
in Federal Orders with utilization rates below 80 percent. As an Order's supplies accumulate, some producers ship their milk to plants regulated under other Orders having more favorable utilization rates. Often, this means shipping milk a greater distance which increases the cost of marketing. The process by which producers market milk on Federal Orders having the most favorable price results in blend price alignment. In recent years, Class I utilization rates in virtually all Upper Midwest Federal Orders show a higher surplus level. As indicated in table 2 and shown in figure 2, the average Class I utilization for Orders in the northern area of the Upper Midwest declined from 65 percent in 1960 to 39 percent in 1973; for the central area, it was from 78 percent to 58 percent; and for the southern area, from 74 percent to 62 percent.

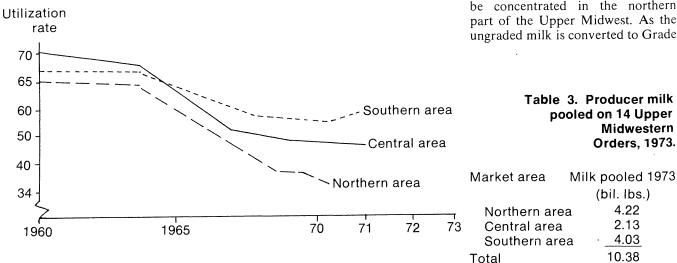
For many markets, slight rises are seen in 1973 utilization rates. Unusually, strong prices for manufacturing-grade milk were responsible for this slight interruption in the general trend toward lower utilization rates. With market conditions normalizing in 1974, conversion to Grade A milk is expected to accelerate. Consequently, Class I utilization will fall.

The potential for depression in Class I utilization rates can be seen by considering the amount of milk currently pooled on Federal Milk Orders in the Upper Midwest. Table 3 gives the amount of milk pooled

Table 2. Class I utilization rates for 14 upper midwestern Orders, 1960, 1965, 1970-73.

,						
		Year				
Order	1960	1965	1970	1971	1972	1973
Minnesota-North Dakota		_	30	27	24	25
Southeast MinnN. Dak.	_		44	40	42	50
Minneapolis-St. Paul	67	66	43	42	43	40
Duluth-Superior	53	54	50	52	53	57
Eastern South Dakota	77	70	59	52	48	45
Five northern markets	65	65	42	40	40	39
Quad Cities-Dubuque	62	68	58	54	48	55
North central lowa	89	91	68	66	63	81
Cedar Rapids-Iowa City	77	61	54	61	81	85
Nebraska-western lowa	80	78	65	61	56	58
Des Moines	79	77	61	54	53	52
Five central markets	78	76	63	59	56	58
Central Illinois	-		57	60	55	51
Southern Illinois			62	60	61	59
St. Louis-Ozarks	75	75	66	64	63	65
Kansas City	71	76	60	58	55	58
Four southern markets	74	75	63	61	60	62





- 4 --

on the Northern, Central, and Southern markets of the Upper Midwest listed in table 2.

In 1972, Minnesota, Iowa, and Wisconsin produced over 17 billion pounds of ungraded milk. As these supplies are converted to Grade A, Class I utilization in the Upper Midwest-and especially in the northern area-could fall drastically.

Conversion of Grade B milk production to Grade A in Minnesota and neighboring states is evident through the number of producers pooled on the Orders in recent years. For years, milk producer numbers, in general, have been subject to great attrition as smaller dairy farms have disappeared and as more profitable farming enterprises have competed for dairying resources. In spite of this, the number of Federal Order producers in the northern area of the Midwest has tended to increase as dairy farms are modernized and converted to Grade A (table 4).

Relative to demand, there are large supplies of Grade A milk in Minnesota and Wisconsin. This has already resulted in a tendency for milk to flow southward. Table 5 shows these state's percentages of milk pooled on the eight Central and Southern Area markets for 1960, 1971, and 1972.

These figures understate the importance of out-of-area milk shipments in maintaining utilization rates and blend prices in Minnesota and Wisconsin. The figures indicate only supplies from producers regularly pooled on those markets. In addition, spot shipments of milk move from Minnesota and Wisconsin to Texas, Florida, and other states.

Ungraded milk supplies tend to be concentrated in the northern part of the Upper Midwest. As the ungraded milk is converted to Grade

Table 4.	Number of milk producers pooled on 14 Upper Midwestern
	Milk Orders 1969-1973

WIIK OTGETS	, 1909-197	э.			
	1969	1970	1971	1972	1973
Minnesota-N. Dakota	~~~	1,684	1,852	1,918	1,409
Minneapolis-St. Paul		4,599	4,797	5,117	5,764
Duluth-Superior		645	615	572	442
Southwest Minnesota		978	1,038	920	831
Eastern South Dakota		393	448	519	500
Northern area		8,299	8,750	9,046	8,946
Quad Cities	698	594	603	655	333
Nebraska-W. Iowa	1,732	1,756	1,744	1,796	1,660
Cedar Rapids	360	396	335	314	404
North Central Iowa	973	996	1,008	796	700
Des Moines	1,171	1,265	1,333	1,434	1,538
Central area	4,934	5,007	5,023	4,995	4,635
Southern Illinois	3,476	2,342	2,420	2,170	2,238
Central Illinois	708	672	764	761	673
St. Louis	3,350	3,337	3,223	3,313	3,293
Kansas City	2,192	2,186	2,201	2,220	1,982
Southern area	8,726	8,537	8,608	8,464	8,186
United States	144,275	143,411	139,365	136,533	127,768

A and pooled on the local orders, depression in blend price relative to blend prices in other Federal Order markets will result. As prices between Federal Order markets get more out of line, incentive is created to pool Minnesota and Wisconsin milk on Orders further south.

Without appropriate institutional changes, continued conversion of ungraded milk in the Upper Midwest will have several harmful economic effects. Among them are: (1) an increase in the cost of marketing (Since milk may have to be shipped greater distances for the most advantageous blend price, transportation costs will increase. In the long run, these costs tend to be passed on to consumers.); (2) disruptive marketing conditions that benefit neither producers nor consumers (The difficulty of pooling new milk supplies will increase because of the Orders' performance provisions. This could lead to a substantial undermining of Order prices.); (3) spatial disorganization (Some producer supplies would have to be shipped additional distances to become qualified under orders; while financially advantageous to producers, such shipments would decrease the spatial efficiency of milk marketing.).

### Order merger

Federal Milk Orders across the nation have been consolidating for years. Orders that once incorporated the physical boundaries of retail competition have tended to become out-of-date as increasingly larger milk bottling plants serve broader areas and as milk is sold in paper cartons through chain stores rather than through home delivery.

When sharp competition exists in overlapping distribution areas between distributors regulated by different Orders, Class I prices under these orders must be coordinated to avoid economic unfairness.

Table 5. Percentage of milk accounted for by producers in Minnesotaand Wisconsin for seven Upper Midwestern Orders: 1969,1971-72.

Order	1969	1971	1972
Quad Cities-Dubuque	5.64	2.76	_
Nebraska-W. Ia.	8.91	8.89	9.25
Des Moines	12.72	18.42	21.16
Central Illinois	12.12	7.32	7.20
Southern Illinois	38.31	46.27	43.69
St. Louis-Ozarks	4.02	2.44	1.82
Kansas City	_	8.55	9.56
-			

Because of these developments, the Federal Order Program has an ongoing process of market mergers. Of 62 Federal Orders in 1973, 18 were from past mergers. Among the largest are: the Boston Regional Order, regulating milk sales in three states; the Ohio Valley Order, which has territory in four states; the Chicago Regional Order; and the Middle Atlantic Order.

Consolidations can improve performance several ways. Among them are: (1) more efficient administration; (2) reduced trucking costs; (3) more stable marketing conditions; (4) less marketing costs between producer and consumer; (5) improved spatial efficiency through more efficient locations of milk plants.

Outright merger of Orders may result in more efficient administration. To realize the blend price under an Order, producers must ship to a qualifying plant. Where plants supply comparable amounts of milk in several marketing areas, they may shift between orders for pooling purposes. This can lead to rapid changes in utilization rates and blend prices between Orders. The large size of many handler contracts with chain store operations make this problem more serious. Where an Order accumulates surpluses, performance provisions may result in an inability to pool all producer milk. This can cause inequity to individual producers and needless transportation cost as milk is moved greater distances to qualify for Federal Order pooling.

Merger, however, is not without disadvantages as a way to help convert Upper Midwest Grade B milk. For a large Order, a serious problem can be determining economically sound Class I prices for all locations in its marketing area. Failure to do so can result in unfair economic advantage to particular handlers or producers. Class I price determination increases in complexity with the size of Orders. Without appropriate location adjustments in Class I prices, certain plants may be much more attractive than others as raw milk customers. Then Order prices could become inoperative as a means to direct milk to handlers.

Large, merged Federal Orders may also require legally innovative provisions for efficient operation. Federal Order program administration is concerned about existing law; Larger Orders through consolidation will likely result in a rigorous delineation of the legal limits within which the Federal Order program can operate.

### **Conditions for merging Orders**

Distribution overlap has been historically the most important merger determinant in Order merger. Economic efficiency requires the same set of regulated prices to handlers competing for the same markets. Otherwise, some handlers would have an advantage. Route sales overlap is considered. Data indicate many Upper Midwest orders are interrelated through handlers' retail competition. Table 6 presents data relating the percentage of each Order's in-area milk sales by plants regulated under the Orders and in which other Upper Midwest Orders had regulated plants with sales in that Order. The Minnesota-North Dakota Marketing

Area had 88.61 percent of the Class I sales in its marketing area accounted for by plants regulated under the Order, and plants regulated under the Minneapolis-St. Paul and Eastern South Dakota Orders also had sales within the Minnesota-North Dakota marketing area. Specific percentages cannot be attached to the sales by plants regulated under other orders\* (designated with an asterisk\*). In most cases, this would result in release of confidential data about individual milk handlers.

Four Upper Midwest Orders— Southeast Minnesota, North Central Iowa, Des Moines, and Central Illinois—had regulated plants selling Class I milk in marketing areas of at least five other orders. Four Orders—Quad Cities-Dubuque, Cedar Rapids-Iowa City, North Central Iowa, and Central Illinois— had less than 60 percent of in-area sales originating from milk plants regulated under the same Order. Consolidation of Orders such as these could easily be accomplished under traditional criteria.

Federal Orders' pricing efficiency is determined by the results for both milk handlers and producers. Milk handlers serving the same retail market should face equal prices for raw milk since unequal prices would be discriminatory. Similarly, raw milk in the country should be worth the same for milk producers similarly situated.

Just as economic results of Federal Orders can sometimes be improved through consolidations that place competing handlers on equal terms, results may also improve through mergers that allow equal term competition for raw milk which depends primarily on blend prices.

Historically, handlers' competition has been the primary merger factor.

## Table 6: Percentage of total in-area sales accounted for by plants under the same order and<br/>designation (\*) for presence of sales by plants regulated under other orders: 14 Upper Midwest<br/>Orders, 1972.

Orders with	regulated	plants	having	sales ir	n marketing area

Market whe	ro	Orde	ers with re	egulai	eu pia	unts nav	nng sa	ies in m	arketin	g area				
product is sold		S.E. Mn. N. Ia.	Mpls St. Paul	Dul Sup.	E.S. Dak.	Quad Cities	Neb W. Ia.	Cedar Rap.	N.C. Iowa	Des Moines		C. III.	St. Louis	Kansas City
Minn-N. <u>Dakota</u>	88.61		*		*									
S.E. Mn. <u>N. Ia.</u>		73.24	*						*	*				
Mpls St. Paul	*	*	99.15	*										
Dul Sup.			*	92.33										
E.S. Dak.	*	*			71.86		*							
Quad Cities						51.66		*	*	*	*	*	*	
Neb W. Ia.					*		93.27			*				*
Cedar Rapids		*				*		58.32	*	*		*		
N.C. Iowa		*				*	*	*	52.37					
Des Moines		*					*	*	*	92.19				*
S. III.									to 1		66.70	) *	*	
C. III.						*					4	9.88	*	
St. Louis											*	*	94.08	3
Kansas City							*		*	*		*,	*	94.13

In the past, milksheds (procurement areas) were relatively distinct. Technological and institutional changes have permitted milk producers to serve more distant markets. Therefore, more weight is given to milkshed overlap in merger decisions.

Table 7 demonstrates the blurring that took place in the Upper Midwest between 1969 and 1972. The figures give the percentages of milk pooled from producers supplying only that particular market during December of 1969 and 1972. Exclusive milksheds for all Orders except St. Louis declined. Table 8 indicates which markets had overlapping milksheds in December 1969 and 1972.

Table 8 shows pronounced procurement overlap in Upper Midwest Orders. Counties with producers pooled on the Southeast Minnesota Order are nearly a subset of counties with producers pooled on the Minneapolis-St. Paul Order. The same was true for the Duluth market, and overlap between the Minnesota-North Dakota and Min-

Table 7.	Percent of milk from counties with producers supplying only	
	one of 14 study area markets.	

one of 14 study area marketor						
Market	December					
	1969	1972				
Minnesota-North Dakota	94.53	43.23				
Southeast Minnesota-N. Iowa	0	0				
Minneapolis-St. Paul	70.49	40.50				
Duluth-Superior	52.62	8.42				
Eastern South Dakota	32.18	22.45				
Quad Cities-Dubuque	11.43	0				
Nebraska-Western Iowa	71.62	65.44				
Cedar Rapids-Iowa City	0	0				
North Central Iowa	0	0				
Des Moines	32.16	14.90				
Southern Illinois	16.99	14.37				
Central Illinois	27.96	20.81				
St. Louis-Ozarks	52.47	61.72				
Kansas City	91.24	75.14				

neapolis-St. Paul Orders increased from 3.26 percent in 1969 to 50.5 percent in 1972.

High overlap is also apparent for the four Iowa Orders and for Central Illinois. Overlap between the Kansas City Order and Minneapolis-St. Paul and Minnesota-North Dakota Orders developed in the period. St. Louis is the only Order in which procurement overlap figures declined.

#### Summary

Route sales and procurement data reveal the development of strong linkages between Federal Milk Orders in the Upper Midwest.

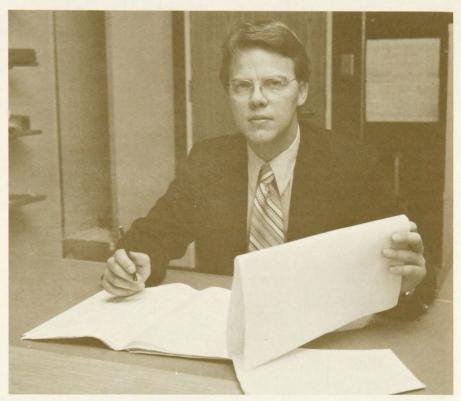
## Table 8. Percent overlap in procurement areas for 14 Upper Midwest Federal Milk Order Markets Volume basis: December 1969 and 1972.

Market supply for order

for orde									0-4-0				-		
			S.E. Mn. N. Iowa		Dul Sup.	E.S. Dakota	Quad	Neb W. Ia.	Cedar Rap.	N.C. Iowa	Des Moines	S. s III.	C. III.	St. Louis	Kansas City
		anuta	N. 10Wa		oup.		Cilles	VV. 14.		10wa		5 111.		Louis	
Minn-N.	1969	—		3.26		2.78			-	-	1.42	-		-	-
Dakota	1972	—	-	50.57	6.49	2.23		-	_		3.98	-		-	-
S.E. Mn.	1969		-	55.44	-	_	_	4.27	_	8.12	83.14	47.50	50.19	-	-
N. Iowa	1972	-		95.64	_	3.82	1.33	3.58		4.14	85.37	71.75	19.12	-	61.64
Mpls	1969	2.39	6.03		18.15	.21	_	.17	_		5.67	.36	.20	-	-
St. Paul	1972	9.33	15.87		19.13	.26	-	.21	-	.20	11.74	18.31	.85		10.08
Dul	1969		~	35.15		-	-	-	-		-	_	-	12.25	_
Sup.	1972	5.85	-	91.51	-	-	-	-	-	-	-	-		-	
E.S.	1969	1.55	-	.83		-	-	65.80			-	-	-	-	
Dakota	1972	6.88	3.02	1.62	-	-	.15	70.21	.15	~	2.52		-	-	_
Quad	1969	_				-		-	65.04	23.37	51.54	63.88	19.92	53.03	_
Cities	1972	-	1.25	-	-	16.05		16.05	82.46	15.79	68.53	15.52	74.79	3.53	.80
Neb	1969		2.23	.66	_	17.36		_	_		7.24			.20	.93
W. Iowa	1972	_	1.02	.50	-	23.53	.28		.85	.33	3.38	-	_	-	8.87
Cedar	1969	_			-	_	87.52	_		79.94	76.54	50.22	_	56.39	
Rapids	1972	-	-	-	-	19.84	81.15	20.39		29.01	74.66	18.59	44.12	10.91	_
N.C.	1969		10.45		-	-	40.77	2.69	68.99		93.97	59.37	.09	48.78	_
lowa	1972		13.57	.43	-	-	90.62	2.69	54.77		92.20	58.39	15.53	_	7.93
Des	1969	_	18.96	1.92	_	_	16.70	9.45	22.06	48.71	_	27.09	2.19	9.82	.21
Moines	1972	.15	25.24	16.78	-	3.76	34.40	5.89	31.06	50.08		32.81	10.71	1.23	10.32
S.	1969	.02	7.93	.35	_		26.07		2.79	8.94	29.47	_	29.04	42.06	
III.	1972	_	15.90	19.18	_		12.16	-	2.34	7.07	19.93	_	27.19	41.50	8.06
C.	1969	_	10.32	3.62			39.15	_	_	4.34	10.50	56.82	_	20.90	
III.	1972	_	7.02	7.02	_		47.20		16.67	.56	20.18	44.41	_	2.98	.52
St.	1969	_			.65	_	4.38	.01	1.53	1.17	3.17	38.11	3.07	_	6.18
Louis	1972	_				_	2.26	_	.43		1.01	36.59	.94	_	1.62
Kansas	1969	_	-	_		_	_	2.13			.11	_		6.92	
City	1972	_	9.64	9.79		_	.05	2.95	_	1.44	9.02	5.48	20	12.08	_
															_

With increased competition between milk handlers regulated under the various orders and a rapid fading of milkshed identities in the region, the purposes of the Federal Order program may be better served through further consolidation of the Orders. Several consolidations could presently be effected using usual criteria and without risking overextension of authority under the Agricultural Marketing Agreement Act.

Full conversion of all Grade B milk in the Upper Midwest demands institutional change. Without change, disorderly marketing conditions may develop, leading to reduced economic efficiency in dairy marketing and benefitting neither producers nor consumers. Creation of a single Federal Order in the Upper Midwest would be one means to help solve this problem. Although this would involve complicated technical problems, particularly regarding location pricing, it is the only one available under existing law.



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