

**TRUCK AND RAIL SHIPMENTS OF
HARD RED SPRING AND DURUM WHEAT
FROM NORTH DAKOTA ELEVATORS
1967-68 AND 1968-69**

By

David C. Nelson

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DAKOTA ELEVATORS 1967-68 AND 1968-69**

BY

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in cooperation with

**North Dakota Public Service Commission
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Preface

In the development and presentation of data such as follows, many people are necessarily involved. This includes personnel in the Public Service Commission, State Wheat Commission, and the Transportation Institute such as clerical help and graduate students who spent many hours transcribing data from reports and tabulating on adding machines.

Most important in providing both funds, data, and labor, however, are the members and officers of the two State agencies. This is extremely important data in the scheme of transportation policy and rate-making; and therefore, they deserve acknowledgment here:

North Dakota State Wheat Commission

Steve Reimers, Chairman	Herman Schmitz, Williston
Carrington	George Smith, Amenia
Emil Anderson, Upham	Floyd Poyzer, Amenia
Fred Mahlmann, Manning	Tom Ridley, Langdon

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Merle Hedlund, Assistant Administrator
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	Gene Carroll, Assistant Director
	Glenn Willman, Assistant to the Director

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HIGHLIGHTS

The major findings of research reported in this publication are as follows:

1. Almost no wheat is shipped direct from North Dakota farms to major markets bypassing country elevators.
2. Origin patterns of trucked wheat appear to be shifting. That is, the major supply area appears to be changing to the eastern part of North Dakota.
3. Both the absolute volume and the proportion of total shipments of wheat by truck are increasing compared to data available for the period 1956-1957.
4. Duluth-Superior continues to become the dominant market destination for trucked wheat.
5. There appears to be observable patterns of shipments of wheat from North Dakota country elevators.
6. More use is apparently being made of the high capacity covered hopper car in shipping wheat from North Dakota.

TRUCK AND RAIL SHIPMENTS OF
HARD RED SPRING AND DURUM WHEAT
FROM NORTH DAKOTA ELEVATORS
1967-1968 AND 1968-1969

David C. Nelson*

Introduction

This report represents a continuation of a series of analyses of the patterns of distribution of grains from North Dakota which began in 1956-1957.¹ Each of the previous analyses have played important roles in providing basic information for the transportation rate-making process and as input into other research. Because the research has been supported both with the University and by those in the grain marketing industry, one of the best sets of data portraying State exports of grain is now available to North Dakotans.

The general traditional approach to the marketing of North Dakota grains has not changed greatly. A large proportion of the grain is destined to the terminal markets of Minneapolis-St. Paul and Duluth-Superior, although larger volumes are now moving West than when the surveys first began in 1957. The pattern of shifting from rail to truck as a mode for shipping grain is continuing. There appears to be very little direct shipments to terminal markets from farms. Therefore, the country elevator continues to act as the primary shipper of North Dakota grains.

Objective

The primary purpose of this report is to illustrate the distribution methods and patterns of hard red spring and durum wheat. This represents the first effort to isolate the two major types of wheat grown in North Dakota. The patterns of distribution for the two periods included here are also compared to data from previous analyses.

Source of Data

The data representing the 1967-1968 and 1968-1969 periods are the first results of the requirement of the North Dakota Public Service

* Director, Upper Great Plains Transportation Institute, North Dakota State University, Fargo.

¹ See Agricultural Economics Reports 14, 15, 17, 44, and 57 and Agricultural Experiment Station Bulletin 462, North Dakota State University, Fargo.

Commission that all North Dakota elevators report monthly movements of all grain by truck and rail. Subsequently, this data represents actual data for the entire population of shippers. In the past, the data has been estimated from questionnaires completed by a small portion or sample of country elevators. There is no possibility for error in this data. As in the past, the data is reported by crop reporting district (Figure 1).

Data were developed to represent shipments of all grains by truck from North Dakota farms direct to terminal or other distant markets. Questionnaires were sent to approximately 10 percent of North Dakota farmers who raised grain (3,978 questionnaires mailed). Almost 28 percent of these were returned (1,105) which formed a basis for a simple ratio estimator to expand the sample data to represent the practices of all grain farmers.

Truck Shipments Direct From Farm

Much less than one percent (.14) of the total wheat shipped from North Dakota bypassed country elevators on the way to major markets. The entire amount originated in three crop reporting districts (3, 4, and 7). The total estimated volume of 262,581 bushels went to the terminals at Minneapolis-St. Paul and Duluth-Superior (Table 1).

TABLE 1. ESTIMATED TOTAL WHEAT SHIPPED DIRECT FROM NORTH DAKOTA FARMS BY TRUCK TO MAJOR MARKETS, BY STATE PLANNING REGIONS, 1969

Origin Crop Reporting District	Destination		Total
	Minneapolis- St. Paul	Duluth- Superior	
	(bushels)		
1	--	--	--
2	--	--	--
3	28,776	71,940	100,716
4	53,955	--	53,955
5	--	--	--
6	--	--	--
7	--	107,910	107,910
8	--	--	--
	82,731	179,850	262,581

Since the total represents only slightly more than one-tenth of one percent of the total wheat marketed, the portion marketed from country elevators forms the basis for transportation policy decisions.

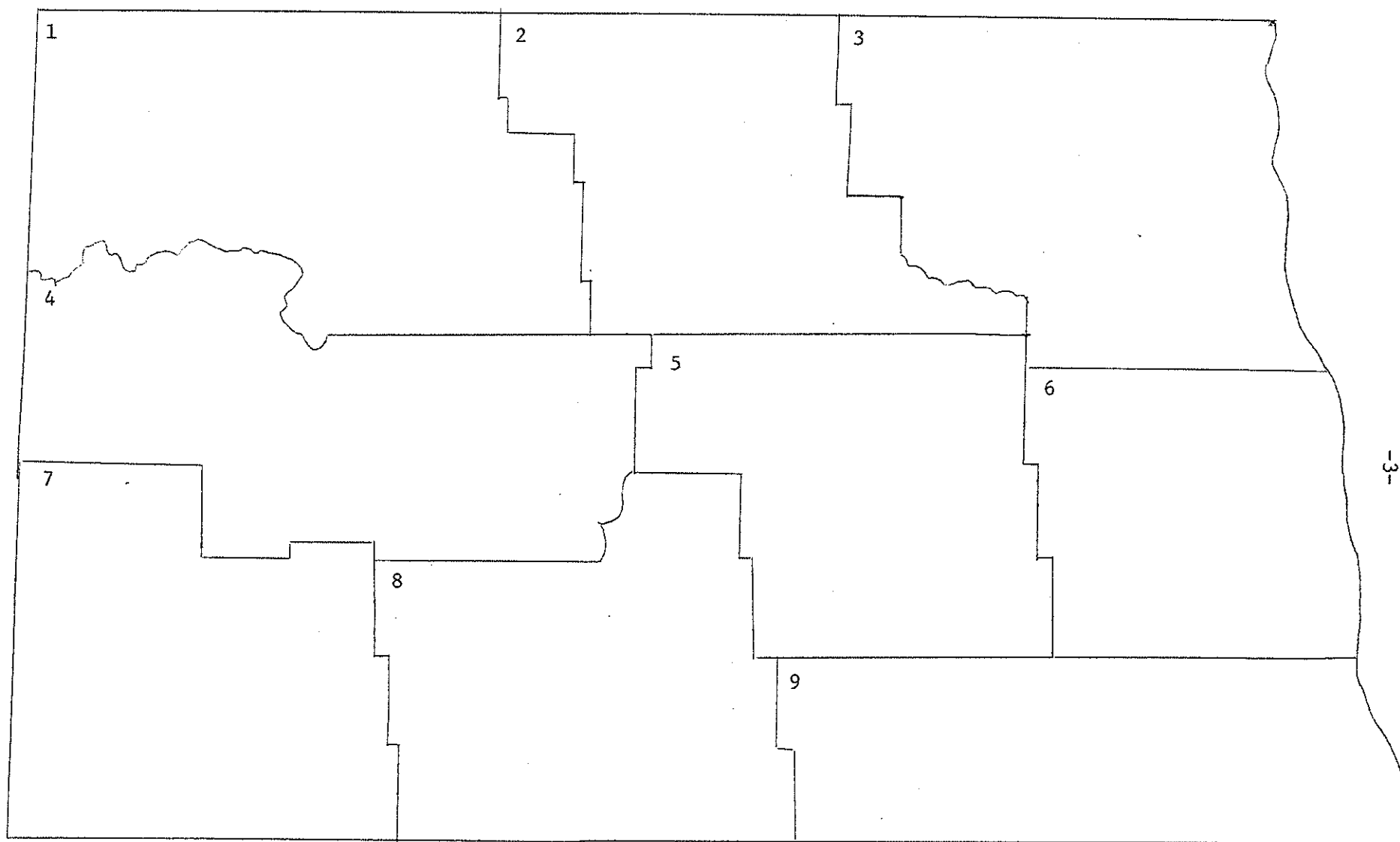


Figure 1. North Dakota Crop Reporting Districts

Sources of Truck Wheat

The primary areas of the State from which trucked wheat originate have changed with an observable pattern since the early 1960's (Tables 2 and 3).

During the 1963-1964 shipping period, 52 percent of the trucked wheat originated in the western part of the State (Districts 1, 4, and 7); 29 percent from the central part (Districts 2, 5, and 8); and 19 percent from the eastern part (Districts 3, 6, and 9). The proportion originating in the central districts amounted to 29 percent and 19 percent from the eastern part of the State.

Through 1968-1969, the proportion originating by truck in the western districts declined to 31 percent of the total. The volume originating in the central districts remained nearly the same at 27 percent, while the proportion originating in the eastern districts increased to 42 percent.

In the case of each origin area, however, the absolute volume increased over the previous period. About 9.9 million bushels of wheat were shipped from the western districts in 1963-1964 and 15 million in 1968-1969. From the central districts, about 5.4 million bushels of wheat were shipped 1963-1964 and 13 million bushels in 1968-1969. The eastern districts shipped about 3.6 million bushels in 1963-1964 and 20.7 million in 1968-1969.

Proportions Shipped by Truck

Motor carriers have gradually increased their share of the wheat traffic from North Dakota from 3.5 percent in 1956-1957 to 26.6 percent in 1968-1969 (Table 4). This trend is well illustrated in Figures 2 and 3. Over the time period, shippers in every crop reporting district have increased their reliance on the truck to get the wheat crop to market.

Destinations of Trucked Wheat

Certain trends are observable in the selection of destinations for truck shipments of wheat by North Dakota elevators (Table 5). The proportion going to Minneapolis-St. Paul shows a continuing decline in 1956-1957 through 1968-1969, while the proportion destined to Duluth-Superior continues to increase. Over the period, the proportion going to Duluth-Superior has increased from about 11 percent of the total to about 72 percent. On the other hand, the proportion destined to Minneapolis-St. Paul has declined from about 67 percent to 24 percent.

TABLE 2. TOTAL VOLUME OF WHEAT SHIPPED BY TRUCK FROM EACH CROP REPORTING DISTRICT, 1963-1964 THROUGH 1968-1969

Crop Reporting District	Year							
					Hard Red Spring		Durum	
	1956-1957	1957-1958	1958-1959	1963-1964	1965-1966	1967-1968	1968-1969	1967-1968 1968-1969
	(000 bushels)							
1	390	1,920	9,584	5,328	2,446	3,556	3,918	3,836 3,227
2	148	137	213	2,848	3,404	1,941	2,212	4,692 4,278
3	920	1,598	1,421	1,817	2,088	3,061	6,273	4,263 5,781
4	166	498	200	301	1,130	1,609	2,262	334 226
5	112	599	301	1,079	825	1,692	2,335	910 839
6	624	554	1,108	1,083	1,256	3,320	5,389	633 910
7	720	705	794	4,230	4,083	4,772	5,270	221 98
8	349	346	899	1,466	3,036	2,973	3,218	267 75
9	183	309	344	668	752	1,607	2,167	553 154
Total	3,612	6,666	14,863	18,820	19,021	24,531	33,044	15,709 15,588
					wheat =	40,240	48,632	

TABLE 3. PROPORTION OF TOTAL WHEAT SHIPPED FROM NORTH DAKOTA BY TRUCK FROM EACH CROP REPORTING DISTRICT, 1963-1964 THROUGH 1968-1969

[illegible]

TABLE 4. PROPORTION OF TOTAL WHEAT SHIPPED FROM EACH CROP REPORTING DISTRICT SHIPPED BY TRUCK, 1957-1958 THROUGH 1963-1964

Crop Reporting District	Year					Hard Red Spring		Durum	
	1956-1957	1957-1958	1958-1959	1963-1964	1965-1966	1967-1968	1968-1969	1967-1968	1968-1969
	(percent)								
1	2.0	9.7	38.0	22.1	7.4	28.7	25.3	36.4	21.3
2	1.0	1.1	1.6	25.0	19.4	30.5	32.4	45.0	37.6
3	4.0	7.6	7.5	8.0	6.8	16.3	33.8	23.9	25.5
4	2.0	7.0	3.3	4.2	10.7	20.6	24.0	18.8	9.9
5	1.0	7.2	3.7	12.0	7.9	19.3	19.7	19.5	10.1
6	6.0	4.7	12.6	11.1	7.9	21.0	31.7	23.1	20.3
7	8.0	6.2	9.5	30.9	24.7	32.4	35.0	30.4	10.2
8	6.0	5.4	19.7	34.0	34.1	35.7	36.6	49.8	15.2
9	<u>2.0</u>	<u>5.4</u>	<u>6.0</u>	<u>10.1</u>	<u>7.9</u>	<u>18.0</u>	<u>21.3</u>	<u>18.6</u>	<u>3.9</u>
Total	3.5	6.4	15.0	17.3	12.4	24.1	29.2	30.1	22.4
					wheat	=	26.1	26.6	

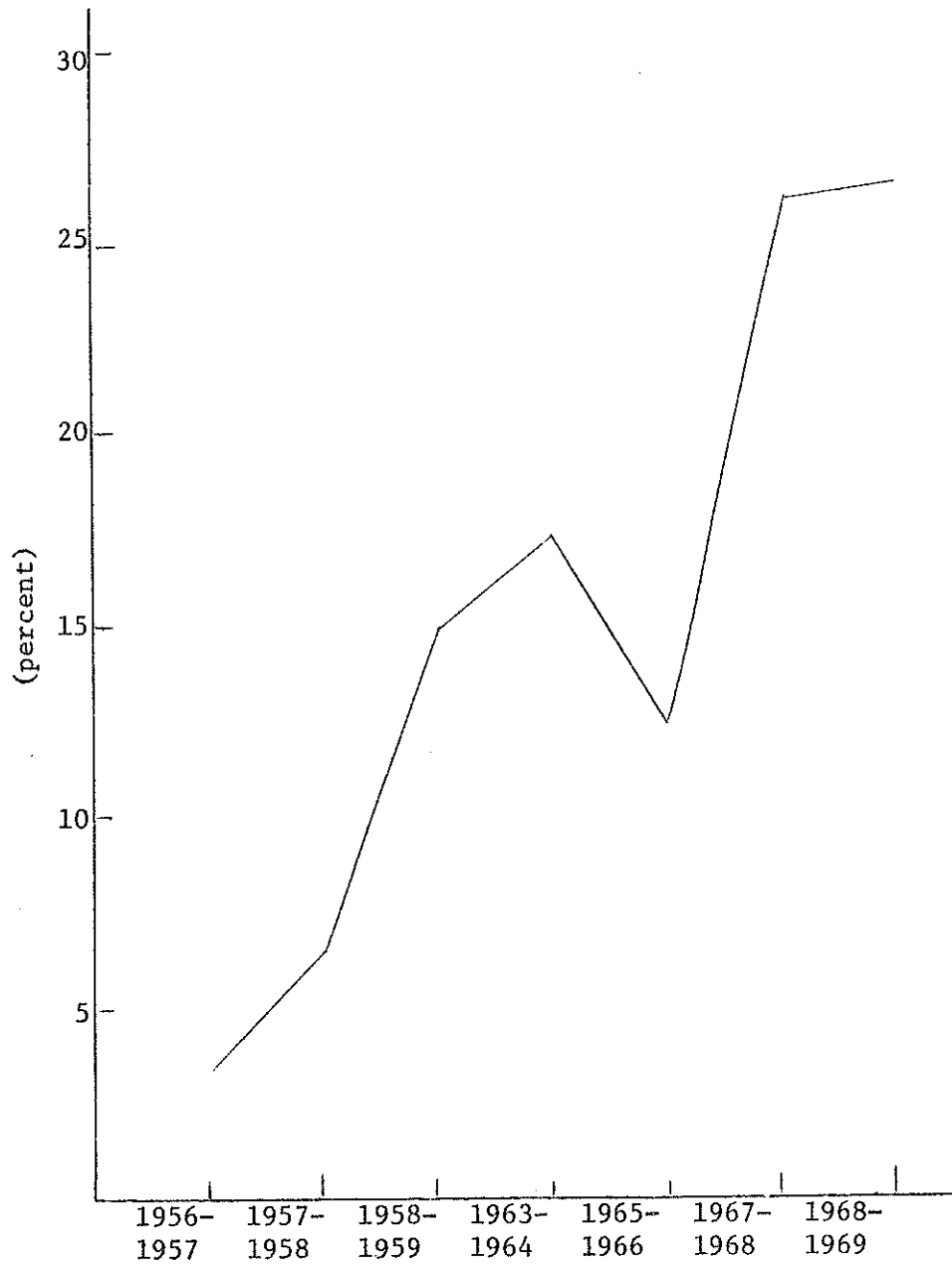


Figure 2. Percent of Total Wheat Shipped from North Dakota Country Elevators Hauled by Trucks, 1963-1964 Through 1968-1969

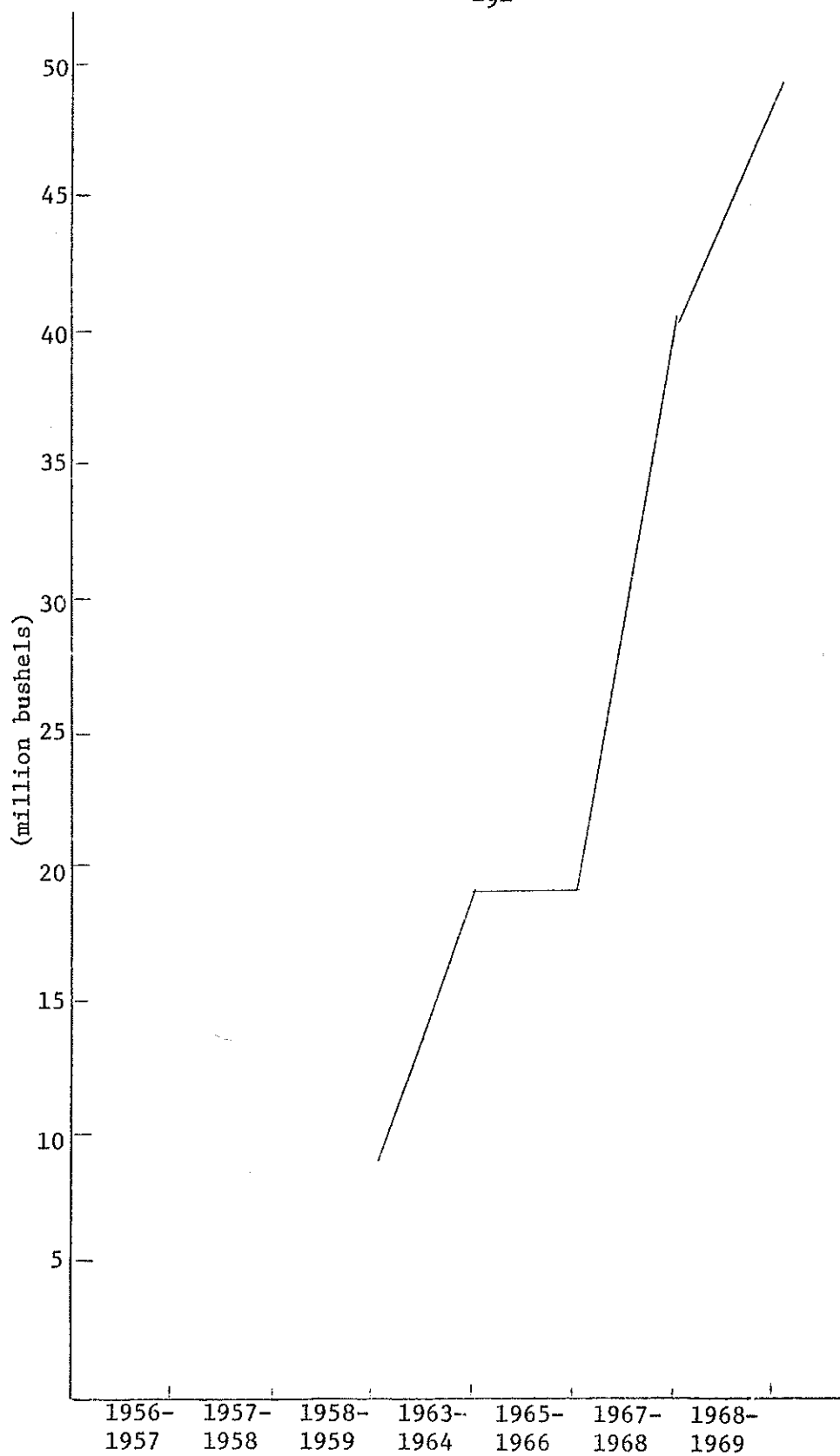


Figure 3. Total Volume of Wheat Shipped by Truck to All Destinations from North Dakota Country Elevators, 1963-1964 Through 1968-1969

TABLE 5. MAJOR DESTINATIONS OF WHEAT SHIPPED BY TRUCK FROM NORTH DAKOTA COUNTRY ELEVATORS, 1956-1957 THROUGH 1968-1969

Destination	Year					Hard Red Spring		Durum	
	1956-1957	1957-1958	1958-1959	1963-1964	1965-1966	1967-1968 ^a	1968-1969 ^a	1967-1968	1968-1969
	(percent)								
Minneapolis-St. Paul	67.3	58.4	64.2	36.9	27.2	41.4	32.5	15.9	6.2
Duluth-Superior	10.9	24.3	30.2	59.3	53.4	51.3	62.6	82.7	92.8
Other Minnesota	11.5	6.4	1.7	--	8.3	3.1	3.1	.3	.3
East and South	--	--	--	--	--	2.1	.7	.3	--
Midland and South- west States	.3	--	--	--	4.9 ^b	1.3	.6	.3	--
West Ports and States	--	--	--	--		.1	.1	.1	.1
In-State	2.6	8.4	3.7	3.8	6.2	.4	.2	.3	.4
Unknown	7.4	2.5	.2	--	--	.3	.1	.1	.2

^a1967-1968 all wheat, Minneapolis-St. Paul = 31.4 percent; Duluth-Superior = 63.5 percent.
1968-1969 all wheat, Minneapolis-St. Paul = 24.1 percent; Duluth-Superior = 72.3 percent.

^bMidland and Southwest States and West Ports and States aggregated in 1965-1966 analysis.

TABLE 6. PROPORTION OF HARD RED SPRING AND DURUM WHEAT SHIPPED BY RAIL, TRUCK, AND CCC (RAIL) TO EACH DESTINATION, 1967-1968 AND 1968-1969

Year and Mode	D E S T I N A T I O N S											In- State known	Un- known
	Duluth- Superior	Minneapolis- St. Paul ^a	Other Minnesota ^b	Sioux City- Omaha- Kansas City	Other East and South ^c	Midland States ^d	South- west States ^e	North Pacific Ports ^f	North- west States ^g	West			
	(percent)												
Hard Red Spring:													
Rail													
1967-1968	63.1	76.3	19.8	46.1	2.9	38.3	50.0	99.7	99.8	--	93.1	--	
1968-1969	51.7	76.1	26.5	16.3	89.2	69.2	100.0	99.8	99.7	--	94.8	--	
Truck													
1967-1968	36.4	22.9	80.2	53.9	97.1	61.7	50.0	.3	.2	--	6.9	100.0	
1968-1969	47.7	22.9	73.5	83.7	10.8	30.8	--	.2	.3	--	5.2	100.0	
CCC													
1967-1968	.5	.8	--	--	--	--	--	--	--	100.0	--	--	
1968-1969	.6	1.0	--	--	--	--	--	--	--	100.0	--	--	
Durum:													
Rail													
1967-1968	44.7	90.7	81.0	--	4.2	--	100.0	94.2	98.5	--	93.5	--	
1968-1969	56.1	97.1	81.3	--	100.0	100.0	--	97.4	87.7	--	92.5	--	
Truck													
1967-1968	55.3	9.3	19.0	--	95.8	100.0	--	5.8	1.5	--	6.5	100.0	
1968-1969	43.8	2.8	18.7	--	--	--	100.0	2.6	12.3	--	7.5	100.0	
CCC													
1967-1968	--	--	--	--	--	--	--	--	--	--	--	--	
1968-1969	.1	.1	--	--	--	--	--	--	--	100.0	--	--	

For the footnotes to this table, see page 32.

TABLE 7. PERCENT OF TOTAL HARD RED SPRING SHIPPED TO EACH DESTINATION BY EACH CROP REPORTING DISTRICT, 1967-1968 AND 1968-1969

Crop Reporting District	D E S T I N A T I O N S											In- State	Un- known	Total
	Duluth- Superior	Minneapolis- St. Paul ^a	Other Minnesota ^b	Sioux City- Omaha- Kansas City	Other East and South ^c	Midland States ^d	South- west States ^e	North Pacific Ports ^f	North- west States ^g	West				
1:														
1967-1968	9.2	13.1	3.9	18.0	36.5	33.8	--	8.5	13.4	34.1	6.9	--	12.1	
1968-1969	10.4	14.6	13.6	49.5	29.7	8.6	100.0	16.2	19.7	10.0	23.4	--	13.7	
2:														
1967-1968	6.4	4.3	.2	2.6	7.9	--	--	8.8	12.3	8.6	1.2	4.4	6.2	
1968-1969	5.8	3.1	2.2	1.0	--	--	--	17.7	13.2	.5	1.1	15.9	6.1	
3:														
1967-1968	18.0	15.1	10.1	.9	.9	1.7	--	25.9	28.8	8.7	53.2	1.4	18.4	
1968-1969	22.3	14.2	5.5	4.1	--	1.4	--	3.1	11.2	21.8	41.2	27.3	16.4	
4:														
1967-1968	8.2	7.1	2.6	.9	2.4	--	--	13.2	7.5	5.0	9.8	--	7.7	
1968-1969	7.7	8.9	3.8	.7	--	--	--	13.0	7.4	1.7	4.6	--	8.3	
5:														
1967-1968	12.5	7.3	8.7	--	3.6	--	--	5.0	5.3	8.7	2.0	20.3	8.6	
1968-1969	11.2	8.5	6.3	8.7	10.8	.5	--	12.3	14.9	23.3	12.0	15.9	10.5	
6:														
1967-1968	22.8	14.8	16.1	--	--	2.1	--	5.5	2.8	12.3	24.4	34.8	15.5	
1968-1969	21.4	14.7	12.3	--	27.0	1.3	--	2.4	1.3	23.0	12.5	--	15.0	

- continued -

TABLE 7. PERCENT OF TOTAL HARD RED SPRING SHIPPED TO EACH DESTINATION BY EACH CROP REPORTING DISTRICT, 1967-1968 AND 1968-1969 - continued

Crop Reporting District	D E S T I N A T I O N S												In- State	Un- known	Total
	Duluth- Superior	Minneapolis- St. Paul ^a	Other Minnesota ^b	Sioux City- Omaha- Kansas City	Other East and South ^c	Midland States ^d	South- west States ^e	North Pacific Ports ^f	North- west States ^g	West					
7:															
1967-1968	10.2	17.7	47.9	62.3	38.0	56.2	50.0	16.7	10.3	10.9	4.4	8.7	14.5		
1968-1969	10.2	12.5	38.5	17.0	32.5	83.4	--	26.0	14.6	5.9	1.2	18.2	13.3		
8:															
1967-1968	6.8	7.2	8.0	14.5	10.2	6.2	--	12.4	14.9	6.1	1.3	4.3	8.2		
1968-1969	6.6	7.6	5.0	19.0	--	3.4	--	6.4	14.9	2.7	2.8	4.5	7.7		
9:															
1967-1968	5.9	13.4	3.0	.9	.5	--	--	4.0	4.7	5.6	.8	26.1	8.8		
1968-1969	4.4	15.9	12.8	--	--	1.4	--	2.9	2.7	11.2	1.2	18.2	9.0		
TOTAL:															
1967-1968	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968-1969	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

For the footnotes to this table, see page 32.

TABLE 8. PERCENT OF TOTAL DURUM SHIPPED TO EACH DESTINATION BY EACH CROP REPORTING DISTRICT, 1967-1968 AND 1968-1969

Crop Reporting District	D E S T I N A T I O N S												In- State	Un- known	Total
	Duluth- Superior	Minneapolis- St. Paul ^a	Other Minnesota ^b	Sioux City- Omaha- Kansas City	Other East and South ^c	Midland States ^d	South- west States ^e	North Pacific Ports ^f	North- west States ^g	West					
1:															
1967-1968	20.2	20.3	11.2	--	--	--	--	11.6	21.6	--	21.0	22.2	20.2		
1968-1969	20.7	22.9	10.7	--	--	--	--	24.7	20.3	--	21.6	--	21.7		
2:															
1967-1968	23.5	16.6	25.4	--	70.8	--	--	8.7	45.6	--	6.7	--	20.0		
1968-1969	17.8	15.3	2.2	--	--	--	--	23.4	39.9	--	4.1	8.3	16.3		
3:															
1967-1968	30.6	36.3	36.2	--	25.0	50.0	--	63.8	24.8	--	68.5	22.2	34.2		
1968-1969	33.4	31.3	.8	--	--	--	--	7.8	5.8	96.7	54.5	36.1	32.6		
4:															
1967-1968	2.7	4.2	--	--	--	--	--	7.9	4.4	--	--	--	3.4		
1968-1969	3.0	3.5	--	--	--	--	--	38.9	--	--	6.7	--	3.3		
5:															
1967-1968	10.1	8.4	3.9	--	--	--	--	7.9	2.9	--	.2	33.3	8.9		
1968-1969	12.5	11.8	11.5	--	--	--	--	2.6	16.7	--	.3	--	11.9		
6:															
1967-1968	6.7	4.1	18.1	--	--	--	100.0	--	--	--	2.5	--	5.2		
1968-1969	7.1	5.5	37.0	--	100.0	--	--	--	--	3.3	12.7	55.6	6.4		

- continued -

TABLE 8. PERCENT OF TOTAL DURUM SHIPPED TO EACH DESTINATION BY EACH CROP REPORTING DISTRICT, 1967-1968 AND 1968-1969 - continued

Crop Reporting District	D E S T I N A T I O N S												In- State	Un- known	Total
	Duluth- Superior	Minneapolis- St. Paul ^a	Other Minnesota ^b	Sioux City- Omaha- Kansas City	Other East and South ^c	Midland States ^d	South- west States ^e	North Pacific Ports ^f	North- west States ^g	West					
7:															
1967-1968	1.0	1.8	.4	--	4.2	--	--	--	.4	--	--	--	--	--	1.4
1968-1969	1.0	1.7	--	--	--	--	100.0	2.6	17.3	--	--	--	--	--	1.4
8:															
1967-1968	1.5	.6	--	--	--	--	--	--	--	--	1.1	--	--	--	1.0
1968-1969	.7	.7	.8	--	--	--	--	--	--	--	.1	--	--	--	.7
9:															
1967-1968	3.7	7.7	4.8	--	--	50.0	--	--	.3	--	--	--	22.2	--	5.7
1968-1969	3.8	7.3	37.0	--	--	--	--	--	--	--	--	--	--	--	5.6
TOTAL:															
1967-1968	100.0	100.0	100.0	--	100.0	100.0	100.0	100.0	100.0	--	100.0	100.0	100.0	100.0	100.0
1968-1969	100.0	100.0	100.0	--	100.0	--	--	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

For the footnotes to this table, see page 32.

It is also interesting to note that the proportion going to Other Minnesota destinations and to North Dakota destinations have declined over the period.

Shipments by Periods

For the first time in the time period covered in analyzing distribution patterns of North Dakota grains, shipments by time period are now available (Appendix Tables 5, 6, 7, and 8). There is evidence that in spite of substantial increases in farm storage capacity, there are still rather radical seasonal shipment patterns of wheat from North Dakota (Figures 4 and 5). These fluctuations do not appear to be materially affected by movements of spring or durum wheat by the Commodity Credit Corporation (at least for this time period).

Number of Cars and Trucks

As in the case of the data regarding shipments by time period, data are available for the first time regarding numbers of rail cars used in hauling wheat and the number of trucks hauling wheat over the North Dakota highway system (Tables 9 and 10).

In the case of both spring and durum wheat, the average volume hauled by rail car increased from the 1967-1968 to the 1968-1969 time period. Although it is not known to what degree covered hopper cars were used relative to boxcars, the data appear to indicate that more use of the high capacity covered hopper car was made in the 1968-1969 period than in the 1967-1968 period. This indicates more use of new technology in rail transport.

On the other hand, the average volume handled by trucks actually decreased from 1967-1968 to 1968-1969. This would indicate no increase in efficiency in the motor carrier industry serving the North Dakota grain shipper (per truck load handled).

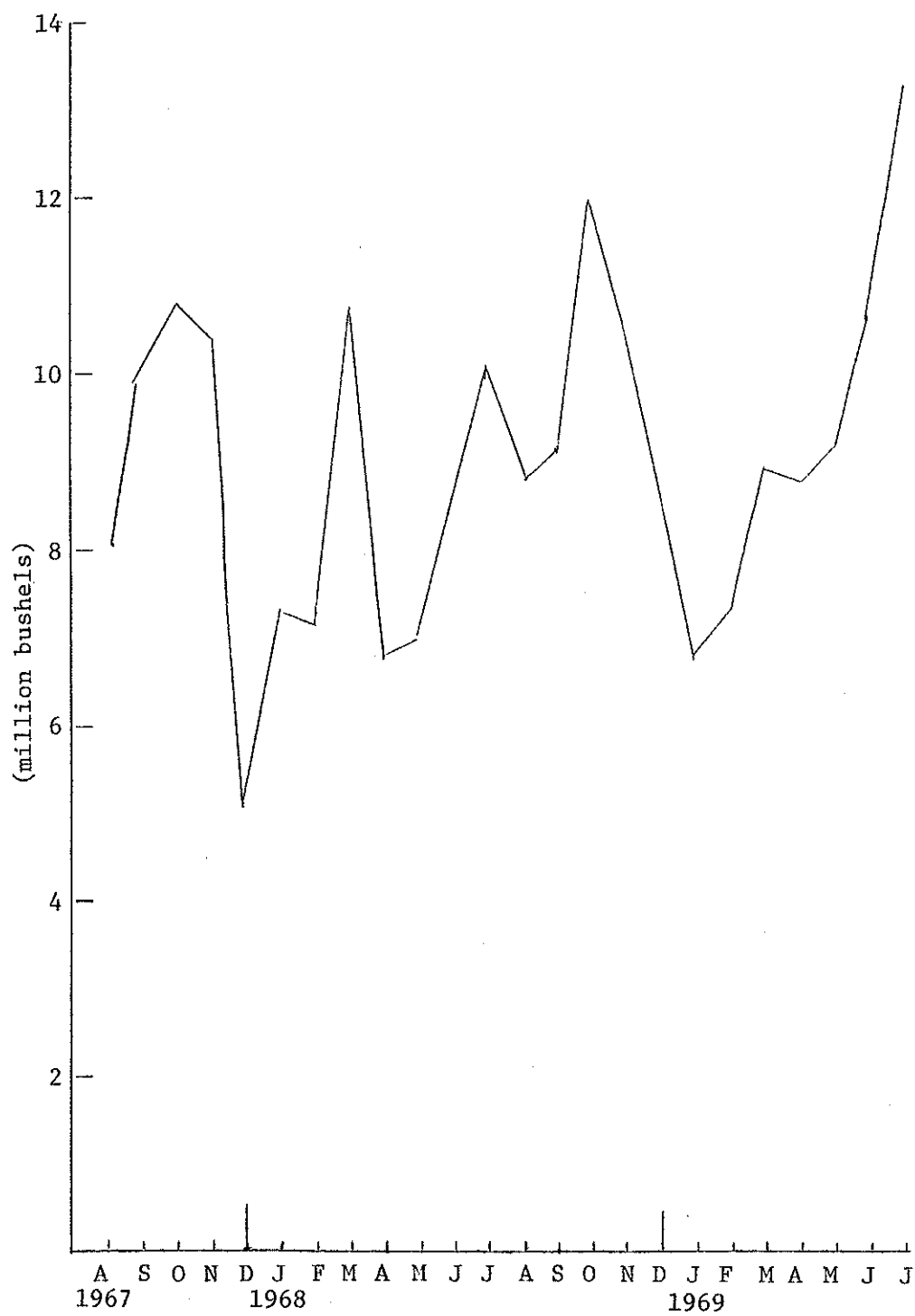


Figure 4. Shipments of Hard Red Spring Wheat from Country Elevators, by Months, August, 1967 Through July, 1969

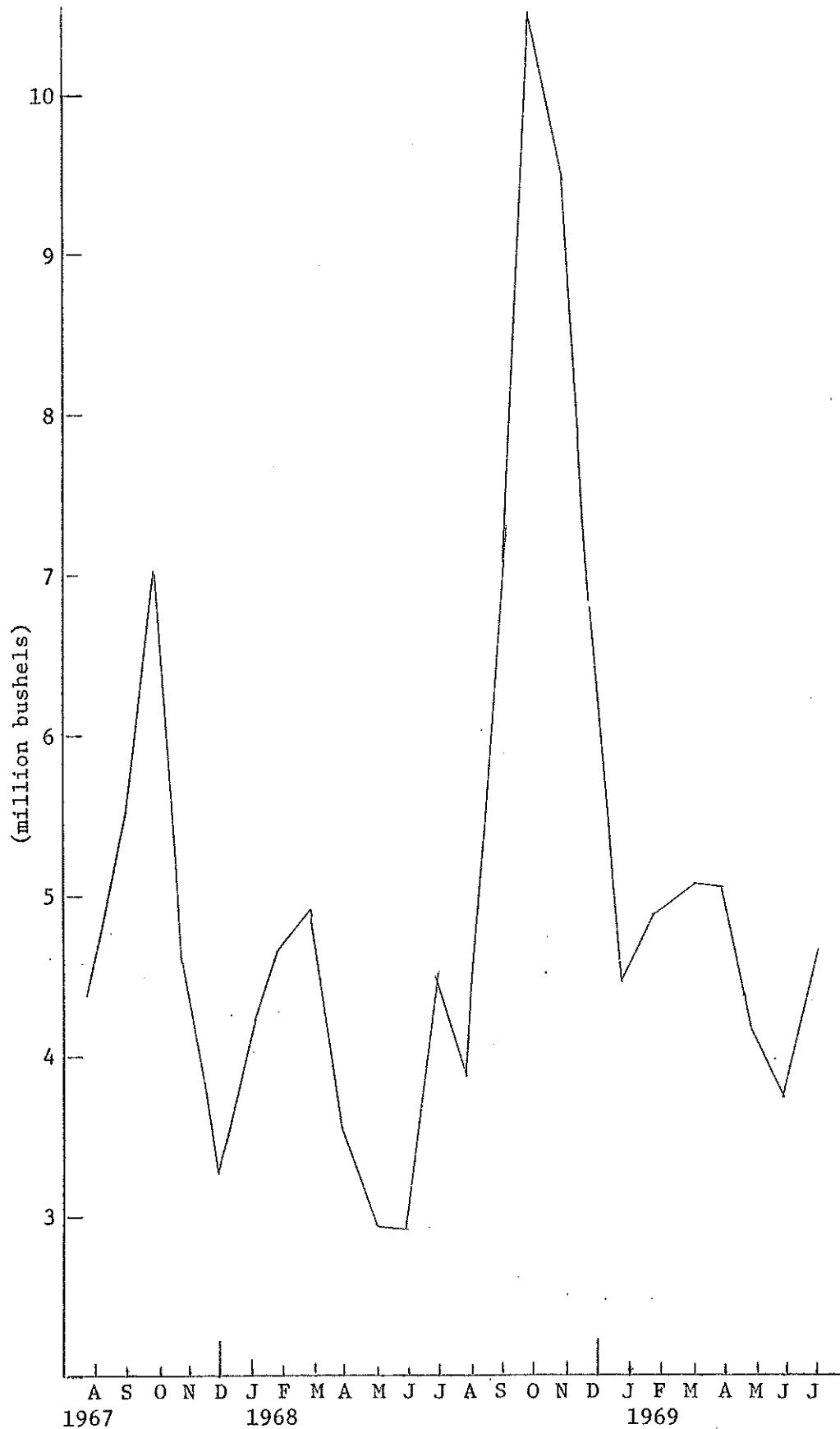


Figure 5. Shipments of Durum Wheat from Country Elevators, by Months, August, 1967 Through July, 1969

TABLE 9. AVERAGE VOLUME OF HARD RED SPRING WHEAT SHIPPED BY RAIL CAR AND BY TRUCK FROM NORTH DAKOTA COUNTRY ELEVATORS BY CROP REPORTING DISTRICT, 1967-1968 AND 1968-1969

Origin and Mode	Number of Cars		Number of Trucks		Average Volume	
	1967-1968	1968-1969	1967-1968	1968-1969	1967-1968	1968-1969
					(bushels)	
1: Rail	3,560	4,689	--	--	2,183	2,418
Truck	--	--	4,811	5,783	739	678
CCC	447	100	--	--	2,347	2,460
2: Rail	1,916	2,044	--	--	2,185	2,247
Truck	--	--	2,543	2,847	763	777
CCC	110	13	--	--	2,073	2,077
3: Rail	6,533	5,018	--	--	2,358	2,356
Truck	--	--	3,816	7,899	802	794
CCC	104	193	--	--	2,615	2,472
4: Rail	2,531	2,656	--	--	2,386	2,690
Truck	--	--	2,107	2,934	764	771
CCC	65	6	--	--	2,446	2,167
5: Rail	5,493	4,023	--	--	2,162	2,312
Truck	--	--	2,128	3,081	795	758
CCC	111	111	--	--	2,261	2,090
6: Rail	5,493	5,092	--	--	2,216	2,226
Truck	--	--	4,254	6,916	780	779
CCC	156	146	--	--	1,929	1,945
7: Rail	3,954	4,369	--	--	2,447	2,223
Truck	--	--	6,138	6,844	777	770
CCC	125	24	--	--	2,376	2,417

- continued -

TABLE 9. AVERAGE VOLUME OF HARD RED SPRING WHEAT SHIPPED BY RAIL CAR AND BY TRUCK FROM NORTH DAKOTA COUNTRY ELEVATORS BY CROP REPORTING DISTRICT, 1967-1968 AND 1968-1969 - continued

Origin and Mode	Number of Cars		Number of Trucks		Average Volume	
	1967-1968	1968-1969	1967-1968	1968-1969	1967-1968	1968-1969
					(bushels)	
8: Rail	2,419	2,518	--	--	2,131	2,187
Truck	--	--	3,852	4,207	771	765
CCC	100	25	--	--	2,020	2,320
9: Rail	3,316	3,432	--	--	2,156	2,302
Truck	--	--	1,993	2,833	806	765
CCC	78	46	--	--	2,103	2,630
STATE:						
Rail	32,643	33,841	--	--	2,279	2,324
Truck	--	--	31,642	43,344	775	762
CCC	1,296	664	--	--	2,255	2,283

TABLE 10. AVERAGE VOLUME OF DURUM WHEAT SHIPPED BY RAIL CAR AND BY TRUCK FROM NORTH DAKOTA COUNTRY
ELEVATORS BY CROP REPORTING DISTRICT, 1967-1968 AND 1968-1969

Origin and Mode	Number of Cars		Number of Trucks		Average Volume	
	1967-1968	1968-1969	1967-1968	1968-1969	1967-1968	1968-1969
					(bushels)	
1: Rail	3,085	4,923	--	--	2,173	2,417
Truck	--	--	5,025	4,133	763	781
CCC	1	--	--	--	--	2,000
2: Rail	2,672	2,990	--	--	2,150	2,377
Truck	--	--	5,886	5,435	797	787
CCC	--	--	--	--	--	--
3: Rail	6,172	7,446	--	--	2,200	2,234
Truck	--	--	5,233	7,214	815	801
CCC	3	118	--	--	2,000	2,508
4: Rail	616	788	--	--	2,347	2,614
Truck	--	--	425	311	786	727
CCC	--	--	--	--	--	--
5: Rail	1,769	3,200	--	--	2,118	2,338
Truck	--	--	1,189	1,057	765	794
CCC	--	--	--	--	--	--
6: Rail	1,039	1,655	--	--	2,022	2,149
Truck	--	--	819	1,428	773	637
CCC	1	11	--	--	2,000	1,909
7: Rail	249	416	--	--	2,028	2,075
Truck	--	--	260	127	850	772
CCC	1	--	--	--	2,000	--

- continued -

TABLE 10. AVERAGE VOLUME OF DURUM WHEAT SHIPPED BY RAIL CAR AND BY TRUCK FROM NORTH DAKOTA COUNTRY
ELEVATORS BY CROP REPORTING DISTRICT, 1967-1968 AND 1968-1969 - continued

Origin and Mode	Number of Cars		Number of Trucks		Average Volume	
	1967-1968	1968-1969	1967-1968	1968-1969	1967-1968	1968-1969
					(bushels)	
8: Rail	134	197	--	--	2,007	2,127
Truck	--	--	423	85	631	882
CCC	--	--	--	--	--	--
9: Rail	1,216	1,721	--	--	1,981	2,178
Truck	--	--	637	204	868	755
CCC	3	1	--	--	2,000	2,000
STATE:						
Rail	16,952	23,336	--	--	2,154	2,304
Truck	--	--	19,897	19,994	790	780
CCC	8	131	--	--	2,000	2,450

APPENDIX

APPENDIX TABLE 1. SHIPMENTS OF HARD RED SPRING WHEAT FROM NORTH DAKOTA ELEVATORS, AUGUST, 1967, THROUGH JULY, 1968

D E S T I N A T I O N S													
Origin and Mode	Duluth- Superior	Minneapolis- St. Paul ^a	Other Minnesota ^b	Sioux	Other	Midland States ^d	South-	North	North-	West	In-	Un-	Total
				City- Omaha- Kansas City	East and South ^c		west States ^e	Pacific Ports ^f	west States ^g				
(000 bushels)													
1:													
Rail	1,480	4,039	25	--	2	24	32	342	1,746	--	83	--	7,773
Truck	1,624	1,590	11	41	149	134	--	2	--	--	5	--	3,556
CCC	64	179	--	--	--	--	--	--	--	806	--	--	1,049
	3,168	5,808	36	41	151	158	32	344	1,746	806	88	--	12,378
2:													
Rail	762	1,446	--	--	--	--	--	358	1,608	--	12	--	4,186
Truck	1,460	434	2	6	33	--	--	--	h	--	3	3	1,941
CCC	6	19	--	--	--	--	--	--	--	203	--	--	228
	2,228	1,899	2	6	33	--	--	358	1,608	203	15	3	6,355
3:													
Rail	3,749	6,161	9	2	4	8	--	1,048	3,755	--	666	--	15,402
Truck	2,464	481	85	--	--	--	--	--	14	--	16	1	3,061
CCC	9	57	--	--	--	--	--	--	--	206	--	--	272
	6,222	6,699	94	2	4	8	--	1,048	3,769	206	682	1	18,735
4:													
Rail	1,672	2,727	--	--	--	--	--	533	980	--	126	--	6,038
Truck	1,131	435	24	2	10	--	--	2	5	--	--	--	1,609
CCC	36	4	--	--	--	--	--	--	--	119	--	--	159
	2,839	3,166	24	2	10	--	--	535	985	119	126	--	7,806
5:													
Rail	3,212	2,645	68	--	6	--	--	202	684	--	26	--	6,843
Truck	1,099	551	13	--	9	--	--	--	6	--	--	14	1,692
CCC	17	28	--	--	--	--	--	--	--	206	--	--	251
	4,328	3,224	81	--	15	--	--	202	690	206	26	14	8,786

- continued -

APPENDIX TABLE 1. SHIPMENTS OF HARD RED SPRING WHEAT FROM NORTH DAKOTA ELEVATORS, AUGUST, 1967, THROUGH JULY, 1968 - continued

Origin and Mode	D E S T I N A T I O N S												Un- known	Total
	Duluth- Superior	Minneapolis- St. Paul ^a	Other Minnesota ^b	Sioux City- Omaha- Kansas City	Other East and South ^c	Midland States ^d	South- west States ^e	North Pacific Ports ^f	North- west States ^g	West	In- State			
	(000 bushels)													
6:														
Rail	6,139	5,115	56	--	--	10	--	222	362	--	268	--	12,172	
Truck	1,708	1,449	94	--	--	--	--	--	--	--	45	24	3,320	
CCC	--	11	--	--	--	--	--	--	--	290	--	--	301	
	7,847	6,575	150	--	--	10	--	222	362	290	313	24	15,793	
7:														
Rail	2,105	5,322	12	103	--	114	--	668	1,349	--	2	--	9,675	
Truck	1,415	2,524	436	39	157	149	32	8	4	--	2	6	4,772	
CCC	17	21	--	--	--	--	--	--	--	259	--	--	297	
	3,537	7,867	448	142	157	263	32	676	1,353	259	4	6	14,744	
8:														
Rail	878	1,798	12	--	--	23	--	502	1,942	--	--	--	5,155	
Truck	1,438	1,371	63	33	42	6	--	--	h	--	17	3	2,973	
CCC	19	39	--	--	--	--	--	--	--	144	--	--	202	
	2,335	3,208	75	33	42	29	--	502	1,942	144	17	3	8,330	
9:														
Rail	1,788	4,576	4	--	--	--	--	162	610	--	10	--	7,150	
Truck	232	1,329	24	2	2	--	--	--	--	--	--	18	1,607	
CCC	7	25	--	--	--	--	--	--	--	132	--	--	164	
	2,027	5,930	28	2	2	--	--	162	610	132	10	18	8,921	
TOTAL:														
Rail	21,785	33,829	186	105	12	179	32	4,037	13,036	--	1,193	--	74,394	
Truck	12,571	10,164	752	123	402	289	32	12	29	--	88	69	24,531	
CCC	175	383	--	--	--	--	--	--	--	2,365	--	--	2,923	
	34,531	44,376	938	228	414	468	64	4,049	13,065	2,365	1,281	69	101,848	

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For the footnotes to this table, see page 32.

APPENDIX TABLE 2. SHIPMENTS OF HARD RED SPRING WHEAT FROM NORTH DAKOTA ELEVATORS, AUGUST, 1968, THROUGH JULY, 1969

D E S T I N A T I O N S														
Origin and Mode	Duluth- Superior	Minneapolis- St. Paul ^a	Other Minnesota ^b	Sioux	Other	Midland States ^d	South- west States ^e	North Pacific Ports ^f	North- west States ^g	West	In- State	Un- known	Total	
				Omaha- Kansas City	East and South ^c									
(000 bushels)														
1:														
Rail	1,659	5,813	160	--	7	45	3	1,212	2,166	--	272	--	11,337	
Truck	2,752	982	27	143	4	10	--	--	--	--	h	h	3,918	
CCC	122	49	--	--	--	--	--	--	--	75	--	--	246	
	4,533	6,844	187	143	11	55	3	1,212	2,166	75	272	--	15,501	
2:														
Rail	660	1,128	12	--	--	--	--	1,323	1,458	--	11	--	4,592	
Truck	1,842	340	18	3	--	--	--	--	--	--	2	7	2,212	
CCC	--	23	--	--	--	--	--	--	--	4	--	--	27	
	2,502	1,491	30	3	--	--	--	1,323	1,458	4	13	7	6,831	
3:														
Rail	4,135	5,728	29	--	--	--	--	224	1,239	--	468	--	11,823	
Truck	5,464	715	47	12	--	9	--	3	--	--	11	12	6,273	
CCC	87	226	--	--	--	--	--	--	--	164	--	--	477	
	9,686	6,669	76	12	--	9	--	227	1,239	164	479	12	18,573	
4:														
Rail	1,824	3,513	--	--	--	--	--	961	810	--	37	--	7,145	
Truck	1,530	650	52	2	h	h	--	11	1	--	16	h	2,262	
CCC	--	--	--	--	--	--	--	--	--	13	--	--	13	
	3,354	4,163	52	2	--	--	--	972	811	13	53	--	9,420	
5:														
Rail	3,158	3,389	40	4	4	3	--	919	1,645	--	139	--	9,301	
Truck	1,701	556	47	21	--	--	--	--	2	--	1	7	2,335	
CCC	2	55	--	--	--	--	--	--	--	175	--	--	232	
	4,861	4,000	87	25	4	3	--	919	1,647	175	140	7	11,868	

- continued -

APPENDIX TABLE 2. SHIPMENTS OF HARD RED SPRING WHEAT FROM NORTH DAKOTA ELEVATORS, AUGUST, 1968, THROUGH JULY, 1969 - continued

Origin and Mode	D E S T I N A T I O N S												In- State	Un- known	Total
	Duluth- Superior	Minneapolis- St. Paul ^a	Other Minnesota ^b	Sioux	Other	Midland States ^d	South-	North	North-	West					
				City- Omaha- Kansas City	East and South ^c		west States ^e	Pacific Ports ^f	west States ^g						
(000 bushels)															
6:															
Rail	5,976	4,833	48	--	10	8	--	182	145	--	132	--	11,334		
Truck	3,237	2,016	122	--	--	--	--	--	--	--	14	--	5,389		
CCC	54	57	--	--	--	--	--	--	--	173	--	--	284		
	9,267	6,906	170	--	10	8	--	182	145	173	146	--	17,007		
7:															
Rail	2,427	3,340	13	24	12	358	--	1,944	1,582	--	14	--	9,714		
Truck	2,005	2,515	518	25	--	173	h	h	26	--	--	8	5,270		
CCC	--	14	--	--	--	--	--	--	--	44	--	--	58		
	4,432	5,869	531	49	12	531	--	1,944	1,608	44	14	8	15,042		
8:															
Rail	1,122	2,192	13	19	--	18	--	475	1,639	--	30	--	5,508		
Truck	1,707	1,404	56	36	--	4	--	h	6	--	3	2	3,218		
CCC	11	27	--	--	--	--	--	--	--	20	--	--	58		
	2,840	3,623	69	55	--	22	--	475	1,645	20	33	2	8,784		
9:															
Rail	1,447	5,871	50	--	--	9	--	220	302	--	--	--	7,899		
Truck	445	1,574	126	--	h	h	--	--	--	--	14	8	2,167		
CCC	--	37	--	--	--	--	--	--	--	84	--	--	121		
	1,892	7,482	176	--	--	9	--	220	302	84	14	8	10,187		
TOTAL:															
Rail	22,408	35,807	365	47	33	441	3	7,460	10,986	--	1,103	--	78,653		
Truck	20,683	10,752	1,013	242	4	196	--	14	35	--	61	44	33,044		
CCC	276	488	--	--	--	--	--	--	--	751	--	--	1,516		
	43,367	47,047	1,378	289	37	637	3	7,474	11,021	751	1,164	44	113,213		

For the footnotes to this table, see page 32.

APPENDIX TABLE 3. SHIPMENTS OF DURUM WHEAT FROM NORTH DAKOTA ELEVATORS, AUGUST, 1967, THROUGH JULY, 1968

D E S T I N A T I O N S													
Origin and Mode	Duluth- Superior	Minneapolis- St. Paul ^a	Other Minnesota ^b	Sioux City- Omaha- Kansas City	Other East and South ^c	Midland States ^d	South- west States ^e	North Pacific Ports ^f	North- west States ^g	West	In- State	Un- known	Total
(000 bushels)													
1:													
Rail	1,691	4,681	26	--	--	--	--	144	147	--	145	--	6,704
Truck	3,060	737	--	--	--	--	--	2	9	--	26	2	3,836
CCC	--	--	--	--	--	--	--	--	--	--	--	--	--
	4,751	5,418	26	--	--	--	--	16	156	--	171	2	10,540
2:													
Rail	1,274	4,050	35	--	--	--	--	8	327	--	52	--	5,746
Truck	4,253	372	24	--	34	--	--	4	2	--	3	--	4,692
CCC	--	--	--	--	--	--	--	--	--	--	--	--	--
	5,527	4,422	59	--	34	--	--	12	329	--	55	--	10,438
3:													
Rail	3,416	9,280	67	--	--	--	--	88	179	--	550	--	13,580
Truck	3,761	435	17	--	12	28	--	--	--	--	8	2	4,263
CCC	2	4	--	--	--	--	--	--	--	--	--	--	6
	7,179	9,719	84	--	12	28	--	88	179	--	558	2	17,849
4:													
Rail	335	1,070	--	--	--	--	--	9	32	--	--	--	1,446
Truck	291	41	--	--	h	--	--	2	--	--	--	--	334
CCC	--	--	--	--	--	--	--	--	--	--	--	--	--
	626	1,111	--	--	--	--	--	11	32	--	--	--	1,780
5:													
Rail	1,685	2,019	9	--	--	--	--	11	21	--	2	--	3,747
Truck	690	217	--	--	--	--	--	--	--	--	--	3	910
CCC	--	--	--	--	--	--	--	--	--	--	--	--	--
	2,375	2,236	9	--	--	--	--	11	21	--	2	3	4,657

- continued -

APPENDIX TABLE 3. SHIPMENTS OF DURUM WHEAT FROM NORTH DAKOTA ELEVATORS, AUGUST, 1967, THROUGH JULY, 1968 - continued

D E S T I N A T I O N S														
Origin and Mode	Duluth- Superior	Minneapolis- St. Paul ^a	Other Minnesota ^b	Sioux City- Omaha- Kansas City	Other East and South ^c	Midland States ^d	South- west States ^e	North Pacific Ports ^f	North west States ^g	West	In- State	Un- known	Total	
(000 bushels)														
6:														
Rail	1,151	893	42	--	--	--	2	--	--	--	13	--	2,101	
Truck	426	200	--	--	--	--	--	--	--	--	7	--	633	
CCC	2	--	--	--	--	--	--	--	--	--	--	--	2	
	1,579	1,093	42	--	--	--	2	--	--	--	20	--	2,736	
7:														
Rail	101	399	--	--	2	--	--	--	3	--	--	--	505	
Truck	135	85	1	--	--	--	--	--	--	--	--	--	221	
CCC	--	2	--	--	--	--	--	--	--	--	--	--	2	
	236	486	1	--	2	--	--	--	3	--	--	--	728	
8:														
Rail	153	116	--	--	--	--	--	--	--	--	--	--	269	
Truck	194	64	--	--	--	--	--	--	--	--	9	--	267	
CCC	--	--	--	--	--	--	--	--	--	--	--	--	--	
	347	180	--	--	--	--	--	--	--	--	9	--	536	
9:														
Rail	690	1,708	9	--	--	--	--	--	2	--	--	--	2,409	
Truck	182	339	2	--	h	28	--	--	h	--	--	2	553	
CCC	4	2	--	--	--	--	--	--	--	--	--	--	6	
	876	2,049	11	--	--	28	--	--	2	--	--	2	2,968	
TOTAL:														
Rail	10,496	24,216	188	--	2	--	2	130	711	--	762	--	36,507	
Truck	12,992	2,490	44	--	46	56	--	8	11	--	53	9	15,709	
CCC	8	8	--	--	--	--	--	--	--	--	--	--	16	
	23,496	26,714	232	--	48	56	2	138	722	--	815	9	52,232	

For the footnotes to this table, see page 32.

APPENDIX TABLE 4. SHIPMENTS OF DURUM WHEAT FROM NORTH DAKOTA ELEVATORS, AUGUST, 1968, THROUGH JULY, 1969

D E S T I N A T I O N S													
Origin and Mode	Duluth- Superior	Minneapolis- St. Paul ^a	Other Minnesota ^b	Sioux	Other	Midland States ^d	South- west States ^e	North Pacific Ports ^f	North- west States ^g	West	In- State	Un- known	Total
				Omaha- Kansas City	East and South ^c								
(000 bushels)													
1:													
Rail	3,833	7,851	1	--	--	3	--	19	28	--	162	--	11,897
Truck	3,003	195	24	--	--	--	--	--	--	--	5	--	3,227
CCC	2	--	--	--	--	--	--	--	--	--	--	--	2
	6,838	8,046	25	--	--	3	--	19	28	--	167	--	15,126
2:													
Rail	1,877	5,140	3	--	--	--	--	18	40	--	29	--	7,107
Truck	4,014	241	2	--	--	h	--	--	15	--	3	3	4,278
CCC	--	--	--	--	--	--	--	--	--	--	--	--	--
	5,891	5,381	5	--	--	--	--	18	55	--	32	3	11,385
3:													
Rail	5,384	10,818	2	--	--	--	--	4	8	--	416	--	16,632
Truck	5,637	123	--	--	--	--	--	2	--	--	6	13	5,781
CCC	27	32	--	--	--	--	--	--	--	237	--	--	296
	11,048	10,973	2	--	--	--	--	6	8	237	422	13	22,709
4:													
Rail	874	1,145	--	--	--	--	--	30	--	--	11	--	2,060
Truck	122	63	--	--	--	--	--	h	--	--	41	--	226
CCC	--	--	--	--	--	--	--	--	--	--	--	--	--
	996	1,208	--	--	--	--	--	30	--	--	52	--	2,286
5:													
Rail	3,449	3,977	27	--	--	--	--	2	23	--	2	--	7,480
Truck	689	150	--	--	--	--	--	--	--	--	--	h	839
CCC	--	--	--	--	--	--	--	--	--	--	--	--	--
	4,138	4,127	27	--	--	--	--	2	23	--	2	--	8,319

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APPENDIX TABLE 4. SHIPMENTS OF DURUM WHEAT FROM NORTH DAKOTA ELEVATORS, AUGUST, 1968, THROUGH JULY, 1969 - continued

D E S T I N A T I O N S													
Origin and Mode	Duluth- Superior	Minneapolis- St. Paul ^a	Other Minnesota ^b	Sioux	Other	Midland States ^d	South- west States ^e	North Pacific Ports ^f	North- west States ^g	West	In- State	Un- known	Total
				Omaha- Kansas City	East and South ^c								
(000 bushels)													
6:													
Rail	1,559	1,921	72	--	12	--	--	--	--	--	95	--	3,556
Truck	778	94	15	--	--	--	--	--	--	--	3	20	910
CCC	4	9	--	--	--	--	--	--	--	8	--	--	21
	2,341	1,921	87	--	12	--	--	--	--	8	98	20	4,487
7:													
Rail	267	572	--	--	--	--	--	2	22	--	--	--	863
Truck	65	30	--	--	--	--	1	h	2	--	--	--	98
CCC	--	--	--	--	--	--	--	--	--	--	--	--	--
	332	602	--	--	--	--	1	2	24	--	--	--	961
8:													
Rail	188	228	2	--	--	--	--	--	--	--	1	--	419
Truck	44	31	--	--	--	--	--	--	--	--	--	--	75
CCC	--	--	--	--	--	--	--	--	--	--	--	--	--
	232	259	2	--	--	--	--	--	--	--	1	--	494
9:													
Rail	1,127	2,538	84	--	--	--	--	--	--	--	--	--	3,749
Truck	117	34	3	--	h	--	--	--	--	--	--	--	154
CCC	--	2	--	--	--	--	--	--	--	--	--	--	2
	1,244	2,574	87	--	--	--	--	--	--	--	--	--	3,905
TOTAL:													
Rail	18,558	34,087	191	--	12	3	--	75	121	--	716	--	53,763
Truck	14,469	961	44	--	--	--	1	2	17	--	58	36	15,588
CCC	33	43	--	--	--	--	--	--	--	245	--	--	321
	33,060	35,091	235	--	12	3	1	77	138	245	774	36	69,672

For the footnotes to this table, see page 32.

FOOTNOTES

^aIncludes Savage and Shakopee.

^bRed Wing, Hastings, New Ulm, and Mankato.

^cWisconsin, Illinois, Indiana, Michigan, Ohio, Pennsylvania, New York, Rhode Island, Vermont, Maine, New Hampshire, Massachusetts, Delaware, New Jersey, Connecticut, Maryland, West Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, Arkansas, and Virginia.

^dIncludes the states of Nebraska, Kansas, Iowa, Missouri, and South Dakota.

^eIncludes the states of Wyoming, Utah, Texas, Colorado, Arizona, New Mexico, Oklahoma, Nevada, (southwest designation).

^fIncludes the ports of Portland, Seattle, Astoria, Vancouver, Longview, Tacoma, and Kaloma.

^gIncludes Montana, Idaho, Washington, Oregon, (northwest designation).

^hLess than 1,000 bushels.

APPENDIX TABLE 5. MONTHLY SHIPMENTS OF HARD RED SPRING WHEAT FROM NORTH DAKOTA ELEVATORS, AUGUST, 1967, THROUGH JULY, 1968

Origin and Mode		Months (1967-1968)												Total
		August	September	October	November	December	January	February	March	April	May	June	July	
(000 bushels)														
1:	Rail	620	670	921	857	273	436	492	774	526	514	616	993	7,692
	Truck	240	262	226	332	202	208	252	328	356	377	308	444	3,535
	CCC	80	31	503	87	138	8	167	32	6	--	--	--	1,052
		940	963	1,650	1,276	613	652	911	1,134	888	891	924	1,437	12,279
2:	Rail	167	207	301	493	211	371	328	587	478	477	264	296	4,180
	Truck	95	111	122	196	77	90	77	157	197	175	257	288	1,842
	CCC	--	10	127	2	1	3	78	6	--	--	--	2	229
		262	328	550	691	289	464	483	750	675	652	521	586	6,251
3:	Rail	597	1,957	1,232	1,860	1,070	1,100	952	1,752	1,228	1,049	1,348	1,209	15,354
	Truck	176	263	116	124	148	215	178	220	325	389	478	468	3,100
	CCC	--	62	60	20	22	--	68	5	--	6	--	61	304
		773	2,282	1,408	2,004	1,240	1,315	1,198	1,977	1,553	1,444	1,826	1,738	18,758
4:	Rail	608	712	866	767	258	565	409	611	306	320	260	478	6,160
	Truck	62	83	96	74	74	127	155	162	114	181	212	232	1,572
	CCC	12	--	70	22	--	--	24	--	--	--	--	--	128
		682	795	1,032	863	332	692	588	773	420	501	472	710	7,860
5:	Rail	349	670	849	739	350	426	429	728	386	627	594	693	6,840
	Truck	62	101	74	79	108	117	87	175	190	179	259	252	1,683
	CCC	--	--	121	20	9	--	43	20	--	--	13	25	251
		411	771	1,044	838	467	543	559	923	576	806	866	970	8,774
6:	Rail	810	1,655	1,299	1,119	677	893	860	1,420	715	780	955	1,001	12,184
	Truck	216	215	123	157	126	225	246	379	259	257	537	581	3,321
	CCC	8	50	166	15	2	--	26	--	5	25	28	14	339
		1,034	1,920	1,588	1,291	805	1,118	1,132	1,799	979	1,062	1,520	1,596	15,844

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APPENDIX TABLE 5. MONTHLY SHIPMENTS OF HARD RED SPRING WHEAT FROM NORTH DAKOTA ELEVATORS, AUGUST, 1967, THROUGH JULY, 1968 - continued

Origin and Mode		Months (1967-1968)												Total
		August	September	October	November	December	January	February	March	April	May	June	July	
(000 bushels)														
7:	Rail	1,250	1,154	1,413	1,644	426	908	612	785	403	261	241	645	9,742
	Truck	252	350	372	425	356	457	422	472	402	454	370	441	4,773
	CCC	46	8	45	35	--	--	113	--	--	--	--	50	297
		1,548	1,512	1,830	2,104	782	1,365	1,147	1,257	805	715	611	1,136	14,812
8:	Rail	632	521	672	533	188	378	296	516	214	208	409	570	5,137
	Truck	198	233	290	207	133	270	282	312	219	197	279	357	2,977
	CCC	8	--	90	28	12	11	35	--	--	--	19	--	203
		838	754	1,052	768	333	659	613	828	433	405	707	927	8,317
9:	Rail	922	791	551	496	310	540	442	762	421	483	774	811	7,303
	Truck	55	69	110	113	94	123	166	217	135	140	197	188	1,607
	CCC	4	--	69	4	14	--	59	10	--	--	--	17	177
		981	860	730	613	418	663	667	989	556	623	971	1,016	9,087
TOTAL:														
	Rail	5,955	8,337	8,104	8,508	3,763	5,617	4,820	7,935	4,677	4,719	5,461	6,696	74,592
	Truck	1,356	1,687	1,529	1,707	1,318	1,832	1,865	2,422	2,197	2,349	2,897	3,251	24,410
	CCC	158	161	1,251	233	198	22	613	73	11	31	60	169	2,980
		7,469	10,185	10,884	10,448	5,279	7,471	7,298	10,430	6,885	7,099	8,418	10,116	101,982

APPENDIX TABLE 6. MONTHLY SHIPMENTS OF HARD RED SPRING WHEAT FROM NORTH DAKOTA ELEVATORS, AUGUST, 1968, THROUGH JULY, 1969

Origin and Mode		Months (1968-1969)												Total
		August	September	October	November	December	January	February	March	April	May	June	July	
(000 bushels)														
1:	Rail	908	797	1,238	1,140	919	571	627	513	781	887	1,173	1,785	11,399
	Truck	567	297	297	320	268	334	286	216	292	431	432	522	4,262
	CCC	81	23	--	--	--	--	--	--	--	2	78	63	247
		1,556	1,117	1,535	1,460	1,187	905	913	789	1,073	1,320	1,683	2,370	15,908
2:	Rail	224	178	315	437	388	336	374	431	642	582	290	394	4,591
	Truck	331	172	218	191	174	178	164	54	58	147	223	298	2,228
	CCC	23	--	--	--	--	--	--	--	4	--	--	--	27
		578	350	533	628	562	514	538	485	704	729	513	692	6,826
3:	Rail	572	1,111	1,734	1,450	989	735	687	1,194	1,100	793	474	1,046	11,885
	Truck	353	363	561	449	476	497	494	658	509	374	604	947	6,285
	CCC	27	47	6	--	--	--	--	3	3	72	103	229	490
		952	1,521	2,301	1,899	1,465	1,232	1,181	1,855	1,612	1,239	1,181	2,222	18,660
4:	Rail	312	480	811	754	1,231	565	443	319	534	514	665	518	7,146
	Truck	217	213	181	130	173	185	184	190	138	168	238	261	2,278
	CCC	13	--	--	--	--	--	--	--	--	--	--	--	13
		542	693	992	884	1,404	750	627	509	672	682	903	779	9,437
5:	Rail	469	767	1,085	786	584	551	559	672	1,081	956	903	890	9,303
	Truck	218	38	111	115	130	162	168	244	191	180	272	404	2,233
	CCC	49	34	--	1	--	8	--	--	--	--	34	105	231
		736	839	1,196	902	714	721	727	916	1,272	1,136	1,209	1,399	11,767
6:	Rail	757	1,123	1,271	1,182	863	563	672	1,083	970	696	1,040	1,086	11,306
	Truck	338	413	488	380	367	327	482	631	373	412	487	746	5,444
	CCC	43	--	--	--	--	4	11	19	8	17	4	177	283
		1,138	1,536	1,759	1,562	1,230	894	1,165	1,733	1,351	1,125	1,531	2,009	17,033

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APPENDIX TABLE 6. MONTHLY SHIPMENTS OF HARD RED SPRING WHEAT FROM NORTH DAKOTA ELEVATORS, AUGUST, 1968, THROUGH JULY, 1969 - continued

Origin and Mode	Months (1968-1969)												Total
	August	September	October	November	December	January	February	March	April	May	June	July	
	(000 bushels)												
7: Rail	567	896	1,405	1,293	720	328	648	786	309	675	957	1,157	9,741
Truck	401	384	463	499	371	393	480	496	338	559	480	544	5,408
CCC	14	--	--	--	--	--	--	--	28	--	13	6	61
	982	1,280	1,868	1,792	1,091	721	1,128	1,282	675	1,234	1,450	1,707	15,210
8: Rail	633	628	773	539	300	280	321	303	417	422	451	590	5,657
Truck	277	224	258	297	204	240	322	226	202	342	328	316	3,236
CCC	--	23	17	--	--	5	--	--	--	--	1	6	52
	910	875	1,048	836	504	525	643	529	619	764	780	912	8,945
9: Rail	1,137	649	640	529	322	291	421	666	564	690	1,135	869	7,913
Truck	160	131	174	167	83	99	145	202	231	186	209	390	2,177
CCC	82	4	--	--	--	--	--	--	2	4	13	16	121
	1,379	784	814	696	405	390	566	868	797	880	1,357	1,275	10,211
TOTAL:													
Rail	5,579	6,629	9,272	8,110	6,316	4,220	4,752	6,027	6,398	6,215	7,088	8,335	78,941
Truck	2,862	2,335	2,751	2,548	2,246	2,415	2,725	2,917	2,332	2,799	3,273	4,428	33,631
CCC	332	131	23	1	--	17	11	22	45	95	246	602	1,525
	8,773	9,095	12,046	10,659	8,562	6,652	7,488	8,966	8,775	9,109	10,607	13,365	114,097

APPENDIX TABLE 7. MONTHLY SHIPMENTS OF DURUM WHEAT FROM NORTH DAKOTA ELEVATORS, AUGUST, 1967, THROUGH JULY, 1968

Origin and Mode	Months (1967-1968)												Total
	August	September	October	November	December	January	February	March	April	May	June	July	
	(000 bushels)												
1: Rail	897	535	633	460	319	529	548	770	506	332	367	806	6,702
Truck	293	178	263	103	276	383	473	328	385	348	386	398	3,814
CCC	--	--	--	--	--	--	--	--	--	--	--	--	--
	1,190	713	896	563	595	912	1,021	1,098	891	680	753	1,204	10,516
2: Rail	444	567	730	986	424	477	477	575	372	241	204	259	5,756
Truck	286	199	537	216	331	420	572	484	377	348	394	519	4,683
CCC	--	--	--	--	--	--	--	--	--	--	--	--	--
	730	766	1,267	1,202	755	897	1,049	1,059	749	589	598	778	10,439
3: Rail	1,210	2,347	2,412	1,406	915	780	742	1,260	742	532	490	748	13,584
Truck	110	142	399	289	252	392	506	442	378	329	404	607	4,250
CCC	--	--	--	--	6	--	--	--	--	--	--	--	6
	1,320	2,489	2,811	1,695	1,173	1,172	1,248	1,702	1,120	861	894	1,355	17,840
4: Rail	103	150	264	103	57	94	152	167	152	68	65	71	1,446
Truck	25	10	13	18	35	49	44	17	17	33	29	46	336
CCC	--	--	--	--	--	--	--	--	--	--	--	--	--
	128	160	277	121	92	143	196	184	169	101	94	117	1,782
5: Rail	369	463	815	257	147	277	350	267	172	197	137	313	3,764
Truck	36	23	99	55	68	85	136	68	88	89	60	129	936
CCC	--	--	--	--	--	--	--	--	--	--	--	--	--
	405	486	914	312	215	362	486	335	260	286	197	442	4,700
6: Rail	274	357	411	92	117	116	162	145	108	77	116	144	2,119
Truck	43	41	62	27	50	46	85	46	24	101	54	79	658
CCC	--	--	--	--	2	--	--	--	--	--	--	--	--
	317	398	473	119	169	162	247	191	132	178	170	223	2,779

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APPENDIX TABLE 7. MONTHLY SHIPMENTS OF DURUM WHEAT FROM NORTH DAKOTA ELEVATORS, AUGUST, 1967, THROUGH JULY, 1968 - continued

Origin and Mode	Months (1967-1968)												Total
	August	September	October	November	December	January	February	March	April	May	June	July	
(000 bushels)													
7: Rail	36	58	85	39	25	53	32	63	27	26	11	55	510
Truck	---	1	23	11	20	52	23	16	1	40	22	10	219
CCC	---	---	---	---	2	---	---	---	---	---	---	---	2
	<u>36</u>	<u>59</u>	<u>108</u>	<u>50</u>	<u>47</u>	<u>105</u>	<u>55</u>	<u>79</u>	<u>28</u>	<u>66</u>	<u>33</u>	<u>65</u>	<u>731</u>
8: Rail	29	31	57	77	6	12	18	19	2	5	3	11	270
Truck	8	12	32	14	24	18	21	17	26	33	13	53	271
CCC	---	---	---	---	---	---	---	---	---	---	---	---	---
	<u>37</u>	<u>43</u>	<u>89</u>	<u>91</u>	<u>30</u>	<u>30</u>	<u>39</u>	<u>36</u>	<u>28</u>	<u>38</u>	<u>16</u>	<u>64</u>	<u>541</u>
9: Rail	372	300	246	95	176	232	210	230	131	127	120	203	2,442
Truck	13	9	32	17	43	86	110	27	22	50	35	55	499
CCC	4	---	2	---	---	---	---	---	---	---	---	---	6
	<u>389</u>	<u>309</u>	<u>280</u>	<u>112</u>	<u>219</u>	<u>318</u>	<u>320</u>	<u>257</u>	<u>153</u>	<u>177</u>	<u>155</u>	<u>258</u>	<u>2,947</u>
TOTAL:													
Rail	3,734	4,808	5,653	3,515	2,186	2,570	2,691	3,496	2,212	1,605	1,513	2,610	36,593
Truck	814	615	1,460	750	1,099	1,531	1,970	1,445	1,318	1,371	1,397	1,896	15,666
CCC	4	---	2	---	10	---	---	---	---	---	---	---	16
	<u>4,552</u>	<u>5,423</u>	<u>7,115</u>	<u>4,265</u>	<u>3,295</u>	<u>4,101</u>	<u>4,661</u>	<u>4,941</u>	<u>3,530</u>	<u>2,976</u>	<u>2,910</u>	<u>4,506</u>	<u>52,275</u>

APPENDIX TABLE 8. MONTHLY SHIPMENTS OF DURUM WHEAT FROM NORTH DAKOTA ELEVATORS, AUGUST, 1968, THROUGH JULY, 1969

Origin and Mode		Months (1968-1969)												Total
		August	September	October	November	December	January	February	March	April	May	June	July	
(000 bushels)														
1: Rail		504	990	2,310	1,646	1,290	853	838	595	645	619	701	869	11,860
	Truck	217	165	271	185	239	168	229	280	456	281	299	446	3,236
	CCC	--	--	--	--	--	--	--	--	--	--	--	--	2
		721	1,155	2,581	1,831	1,529	1,021	1,067	875	1,101	900	1,000	1,317	15,098
2: Rail		152	497	1,016	1,319	803	604	518	524	613	425	303	294	7,068
	Truck	266	236	408	496	307	256	387	412	479	307	253	466	4,273
	CCC	--	--	--	--	--	--	--	--	--	--	--	--	--
		418	733	1,424	1,815	1,110	860	905	936	1,092	732	556	760	11,341
3: Rail		562	1,484	3,136	3,085	1,963	1,103	990	1,224	1,030	1,008	500	593	16,678
	Truck	346	364	457	571	427	419	568	681	563	401	455	555	5,807
	CCC	4	--	--	--	--	--	--	--	17	--	112	167	300
		912	1,848	3,593	3,656	2,390	1,522	1,558	1,905	1,610	1,409	1,067	1,315	22,785
4: Rail		25	197	378	292	255	126	142	165	164	92	123	97	2,056
	Truck	26	22	8	12	9	10	12	36	19	23	28	21	226
	CCC	--	--	--	--	--	--	--	--	--	--	--	--	--
		51	219	386	304	264	136	154	201	183	115	151	118	2,282
5: Rail		362	1,340	1,164	989	681	461	534	383	427	413	369	361	7,484
	Truck	115	122	68	90	55	42	95	62	51	20	40	77	837
	CCC	--	--	--	--	--	--	--	--	--	--	--	--	--
		477	1,462	1,232	1,079	736	503	629	445	478	433	409	438	8,321
6: Rail		424	535	574	393	205	127	208	265	227	192	205	202	3,557
	Truck	235	134	50	54	47	109	31	63	52	46	66	27	914
	CCC	--	--	--	--	--	--	--	--	5	3	--	13	21
		659	669	624	447	252	236	239	328	284	241	271	242	4,492

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APPENDIX TABLE 8. MONTHLY SHIPMENTS OF DURUM WHEAT FROM NORTH DAKOTA ELEVATORS, AUGUST, 1968, THROUGH JULY, 1969 - continued

Origin and Mode		Months (1968-1969)												Total
		August	September	October	November	December	January	February	March	April	May	June	July	
(000 bushels)														
7: Rail		29	101	196	112	62	35	55	53	54	37	53	75	862
	Truck	10	18	5	12	2	21	10	2	3	--	2	13	98
	CCC	--	--	--	--	--	--	--	--	--	--	--	--	--
		39	119	201	124	64	56	65	55	57	37	55	88	960
8: Rail		26	31	75	12	16	21	33	38	45	53	49	20	419
	Truck	14	10	7	6	17	4	3	7	1	4	2	2	77
	CCC	--	--	--	--	--	--	--	--	--	--	--	--	--
		40	41	82	18	33	25	36	45	46	57	51	22	496
9: Rail		538	433	429	348	279	159	310	294	192	239	215	306	3,742
	Truck	51	28	13	5	8	--	19	1	5	2	6	30	168
	CCC	--	--	--	--	--	--	--	--	--	--	2	--	2
		589	461	442	353	287	159	329	295	197	241	223	336	3,912
TOTAL:														
Rail		2,622	5,608	9,278	8,196	5,554	3,489	3,628	3,541	3,397	3,078	2,518	2,817	53,726
Truck		1,280	1,099	1,287	1,431	1,111	1,029	1,354	1,544	1,629	1,084	1,151	1,637	15,636
CCC		4	--	--	--	--	--	--	--	22	3	114	184	327
		3,906	6,707	10,565	9,627	6,665	4,518	4,982	5,085	5,048	4,165	3,783	4,638	69,689