### NORTH DAKOTA GRAIN TRANSPORTATION STATISTICS 1973-74

By

Robert J. Tosterud

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### NORTH DAKOTA GRAIN TRANSPORTATION STATISTICS 1973-1974

### $\mathbf{BY}$

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in cooperation with

North Dakota State Wheat Commission Bismarck, North Dakota and North Dakota Public Service Commission Bismarck, North Dakota

#### PREFACE

This report represents a continuation of analyses concerned with the patterns and methods of distributing grain from North Dakota. This series began with the analysis of 1956-57 data and was published in Agricultural Economics Report 14, Department of Agricultural Economics, North Dakota State University. Subsequent years' data were analyzed in Agricultural Economics Reports 15, 17, 44 and 57, and Agricultural Experiment Station Bulletin 462. The compilation and analysis of the data for the year 1967-68 in this series were assumed by the Upper Great Plains Transportation Institute. Also, the data representing the 1967-68 period were the first results of the requirements of the North Dakota Public Service Commission that all North Dakota elevators report monthly movements of grain by truck and rail. Prior to 1967-68, the data had been estimated from questionnaires completed by a small portion or sample of country elevators.

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### TABLE OF CONTENTS

	Page
Preface	ii
North Dakota Grain Transportation Statistics, 1973-74 Objective of Report	1 1 1 1 3
North Dakota Grain Shipments; 1967-68 - 1973-74	5
North Dakota Grain Shipments by Origin (Crop Reporting District)	9
North Dakota Grain Shipments by Month (July, 1973 - June, 1974)	12
North Dakota Grain Shipments by Destination	13
North Dakota Grain Shipments by Rail and Truck and Destination	17
North Dakota Hard Red Spring Wheat Shipments by Destination .	21
North Dakota Hard Red Spring Wheat Shipments by Rail and Truck and Destination	25
North Dakota Hard Red Spring Wheat Shipments by Origin (Crop Reporting District)	29
North Dakota Hard Red Spring Wheat Shipments by Month (July, 1973 - June, 1974)	32
North Dakota Durum Shipments by Destination	33
North Dakota Durum Shipments by Rail and Truck and Destination	37
North Dakota Durum Shipments by Origin (Crop Reporting District)	41
North Dakota Durum Shipments by Month (July, 1973 - June, 1974)	44
North Dakota Barley Shipments by Destination	45
North Dakota Barley Shipments by Rail and Truck and Destination	49

### TABLE OF CONTENTS (Continued)

	Page
North Dakota Barley Shipments by Origin (Crop Reporting District)	5 3
North Dakota Barley Shipments by Month (July, 1973 - June, 1974)	56
North Dakota Oats Shipments by Destination	57
North Dakota Oats Shipments by Rail and Truck and Destination	61
North Dakota Oats Shipments by Origin (Crop Reporting District)	65
North Dakota Oats Shipments by Month (July, 1973 - June, 1974)	68
North Dakota Rye Shipments by Destination	69
North Dakota Rye Shipments by Rail and Truck and Destination	73
North Dakota Rye Shipments by Origin (Crop Reporting District)	77
North Dakota Rye Shipments by Month (July, 1973 - June, 1974)	80
North Dakota Flax Shipments by Destination	81
North Dakota Flax Shipments by Rail and Truck and Destination	85
North Dakota Flax Shipments by Origin (Crop Reporting District)	89
North Dakota Flax Shipments by Month (July, 1973 - June, 1974)	92

### NORTH DAKOTA GRAIN TRANSPORTATION STATISTICS, 1973-74

#### Objective of Report

This report represents a continuation of analyses concerned with the patterns and methods of distributing grain from North Dakota. The collection and compilation of this type of data began in 1956-57. The objective of this report, like its predecessors, is to provide the necessary data base for identifying trends in the distribution of grains from North Dakota.

#### Scope of Report

The data were tabulated according to the major characteristics which typically describe commodity flows. The major characteristics considered were: destination of shipments, mode of shipment, origin of shipment, time of shipment and commodity shipped. These characteristics are defined as follows:

Destination of <u>shipment</u>: Minneapolis-St. Paul, Duluth-Superior, West (includes western states and North Pacific ports) and Miscellaneous markets.

Mode of shipment: Rail or truck. Rail includes Commodity Credit Corportation shipments.

Origin of shipment: The nine crop reporting districts in North Dakota (Figure 1).

Time of shipment: By month, from July, 1973, to June, 1974.

Commodity shipped: Hard red spring wheat, durum, barley,
oats, rye and flax.

#### Source of Data

The data used to analyze the North Dakota grain distribution pattern for the period July, 1973, through June, 1974, were obtained from all country elevators in North Dakota. The source of the data is the North Dakota Public Service Commission's "Grain Movement Reports." Every country elevator in North Dakota is required under state statute to assemble and submit to the Public Service Commission such information desired by the Commission on a monthly basis.

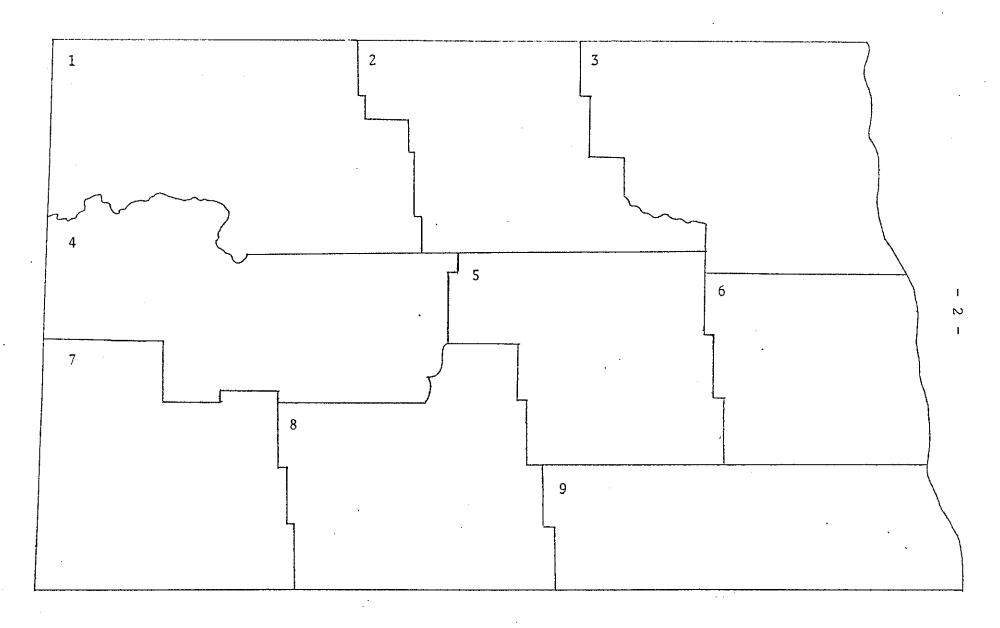


Figure 1. North Dakota Crop Reporting Districts.

#### Organization of the Remainder of the Report

While the same general commodity flow characteristics are considered in this report as in previous reports of this nature, there is a difference in the organization and presentation of the material. The commodity flow characteristic "commodity shipped" is used to delineate major sections of the report. That is, each type of grain, hard red spring wheat, durum, barley, oats, rye and flax, has its own major section. The sections are presented in the order just indicated.

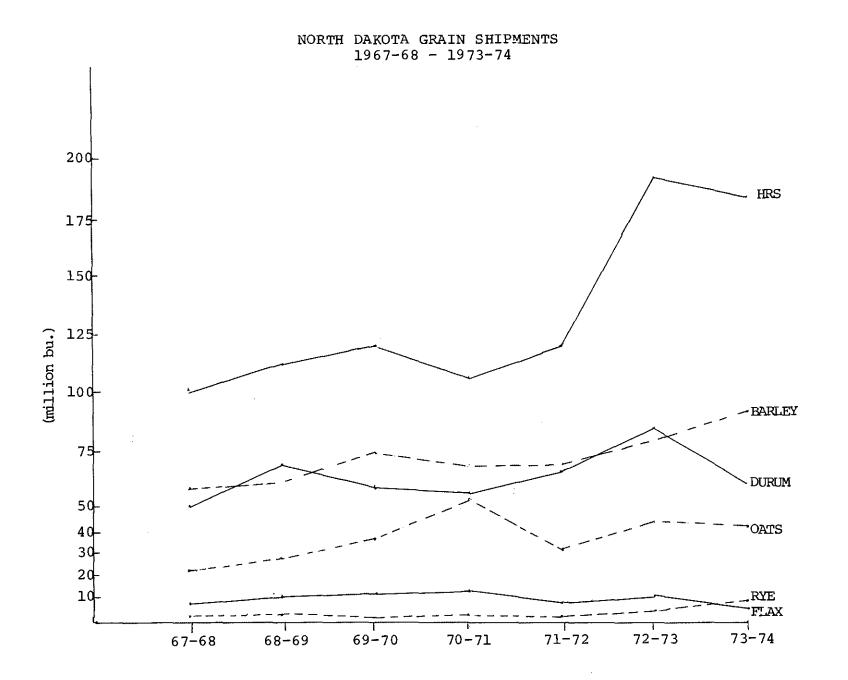
In addition, the number, type and volume of data has been condensed considerably relative to earlier reports with greater reliance placed on the graphical presentation of basic data. It is the intention of this report to get people to understand its content through "reading it for themselves."

### NORTH DAKOTA GRAIN SHIPMENTS 1967-68 — 1973-74

NORTH DAKOTA GRAIN SHIPMENTS\*
1967-68 - 1973-74

	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74
	- W		(thousan	d bu.)			
HARD RED SPRING	101,788	113,164	120,330	105,800	119,944	191,696	183,567
DURUM	52,189	69,589	58,540	57,317	66,184	83,351	60,758
BARLEY	58,705	60,869	74,528	68,996	68,436	78,384	91,739
OATS	24,128	29,296	37,008	55,049	32,009	44,222	41,338
RYE	3,370	4,580	1,672	4,675	3,701	5,009	7,721
FLAX	9,617	11,788	13,133	13,540	8,796	11,411	6,871
TOTAL	249,797	289,286	305,211	305,377	299,071	414,073	391,994

<sup>\*</sup>Includes CCC shipments.

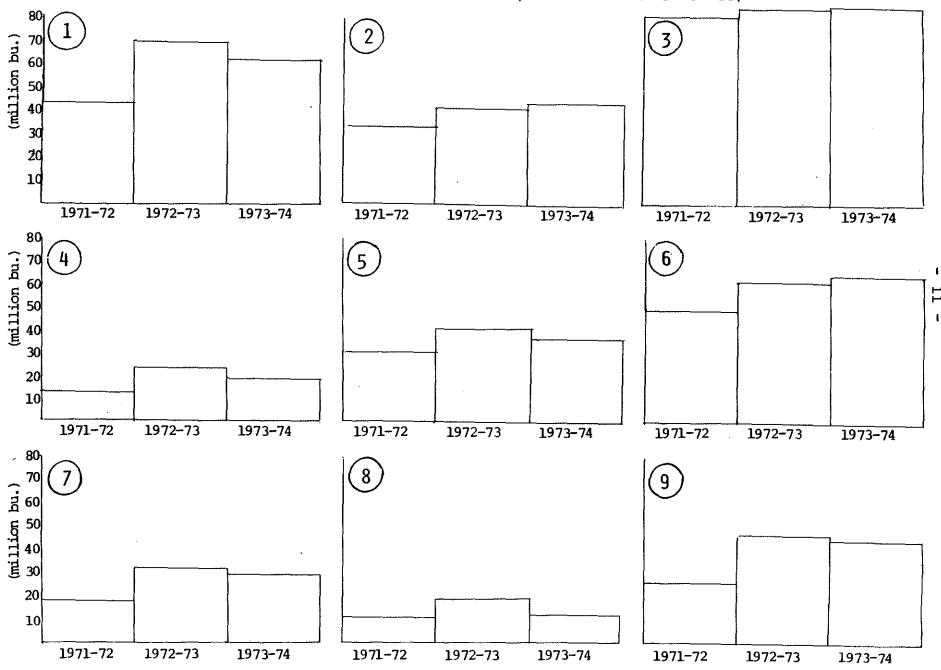


### NORTH DAKOTA GRAIN SHIPMENTS BY ORIGIN (CROP REPORTING DISTRICT)

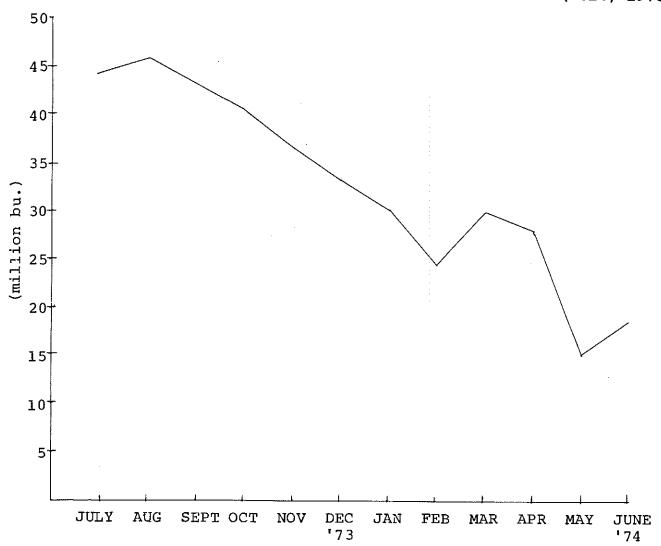
#### NORTH DAKOTA GRAIN SHIPMENTS BY ORIGIN (CROP REPORTING DISTRICT)

CROP REPORTING DISTRICT	1971-72	1972-73	1973-74
DISTRICE	19/11/2	17/2 /3	17/3 /4
	(thousa	and bu.)	
1	42,451	68,671	60,727
2	32,837	40,974	42,948
3	80,209	83,827	83,943
4	12,515	23,704	18,446
5	30,352	40,000	36,720
6	47,949	61,514	62,986
7	16,735	31,050	28,718
8	10,320	18,015	11,741
9	25,713	46,320	44,866

### NORTH DAKOTA GRAIN SHIPMENTS BY ORIGIN (CROP REPORTING DISTRICT)



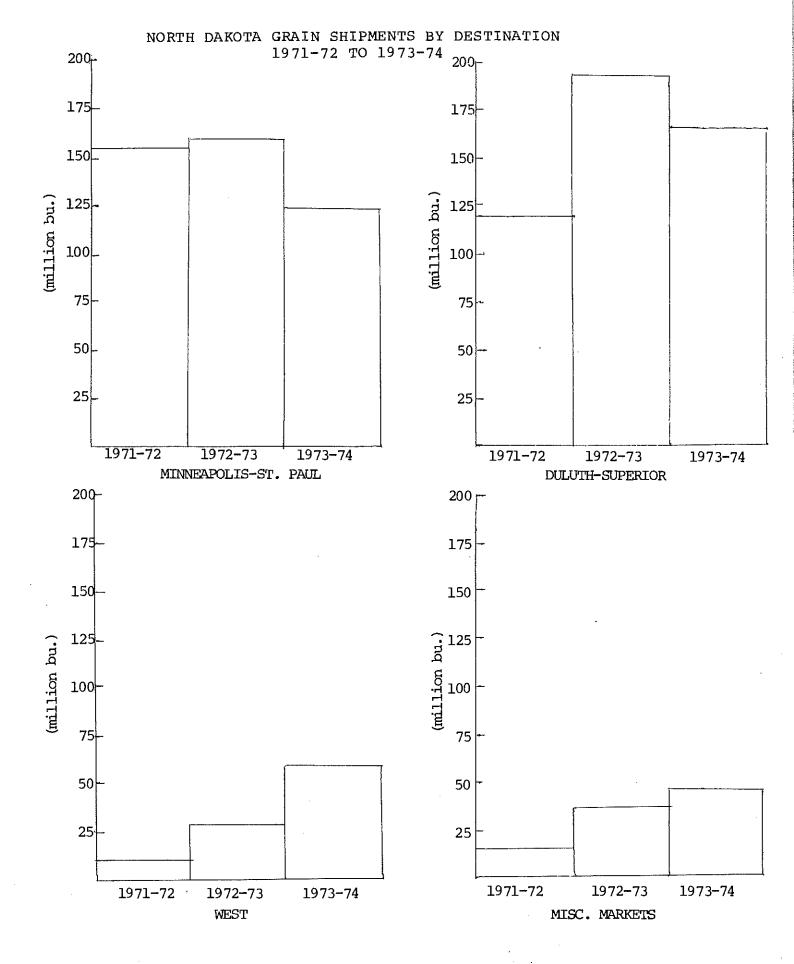
NORTH DAKOTA GRAIN SHIPMENTS BY MONTH (JULY, 1973 - JUNE, 1974)



### NORTH DAKOTA GRAIN SHIPMENTS BY DESTINATION

#### NORTH DAKOTA GRAIN SHIPMENTS BY DESTINATION

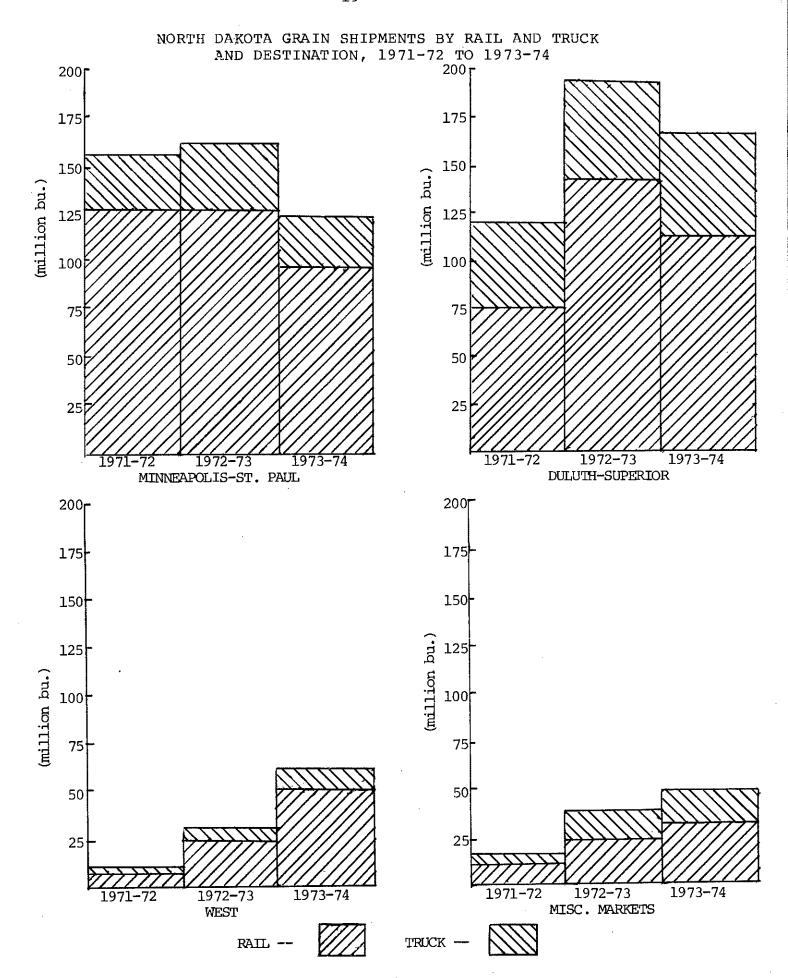
DESTINATION	1971-72	1972-73	1973-74
A VIII AND	(thou	sand bu.)	
MINNEAPOLIS-ST. PAUL	157,084	159,200	124,165
DULUTH-SUPERIOR	119,769	191,054	165,081
WEST	8,623	27,810	57,612
MISCELLANEOUS MARKETS	13,594	36,006	45,133
TOTAL	299,070	414,070	391,991



# NORTH DAKOTA GRAIN SHIPMENTS BY RAIL AND TRUCK AND DESTINATION

### NORTH DAKOTA GRAIN SHIPMENTS BY RAIL AND TRUCK AND DESTINATION

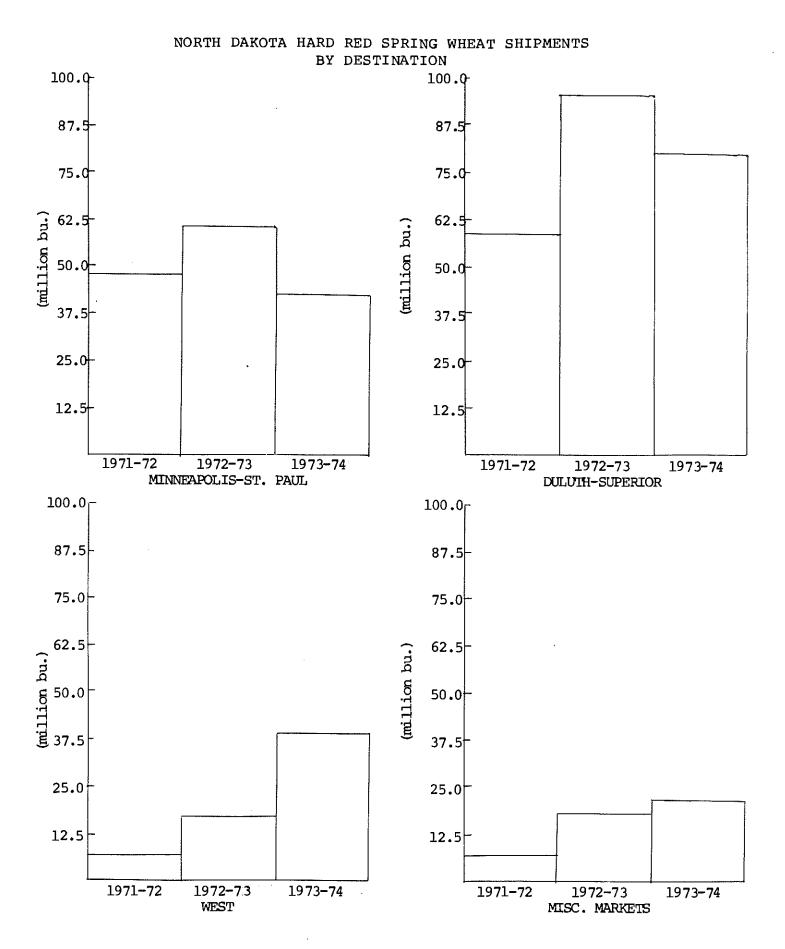
	1971-72		1972-73		1973-74	
DESTINATION	RAIL	TRUCK	RAIL	TRUCK	RAIL	TRUCK
			(thousand b	u.)		
MINNST. PAUL	125,763	31,321	125,529	33,671	97,664	26,501
DULUTH-SUPERIOR	74,944	44,825	141,233	49,821	112,434	52,647
WEST	7,056	1,567	21,364	6,446	49,690	7,922
MISC. MARKETS	8,819	4,775	24,044	11,962	31,024	14,109
TOTAL	216,582	82,488	312,170	101,900	29.0,812	101,179



### NORTH DAKOTA HARD RED SPRING WHEAT SHIPMENTS BY DESTINATION

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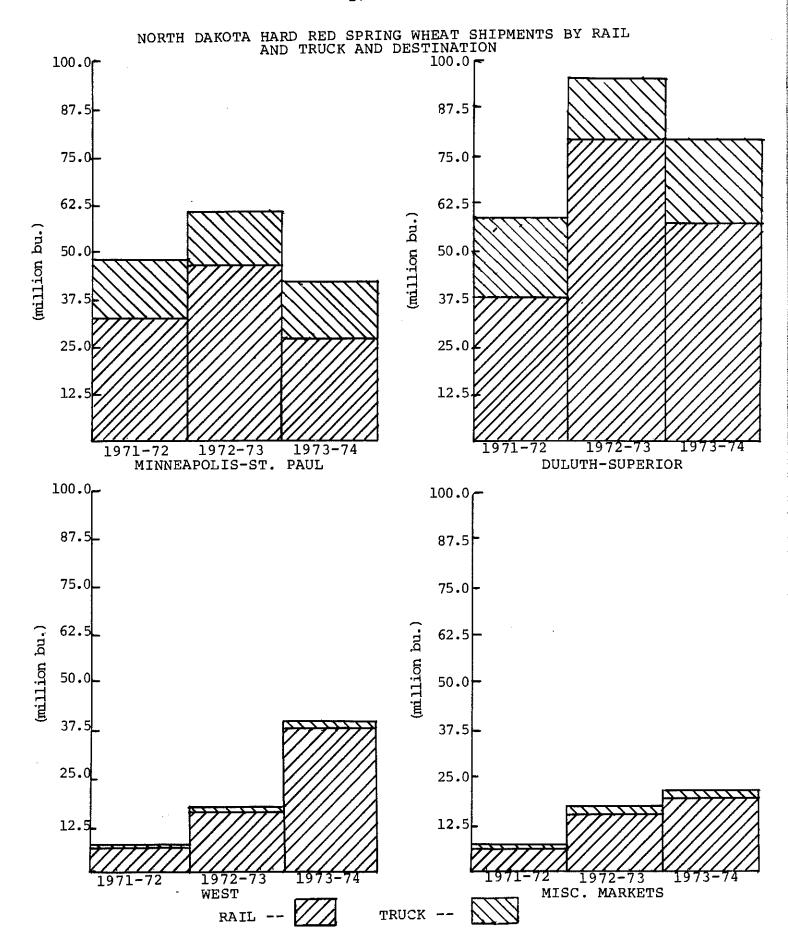
DESTINATION	1971-72	1972-73	1973-74
	(thous	sand bu.)	
MINNEAPOLIS-ST. PAUL	47,979	60,963	42,962
DULUTH-SUPERIOR	58,702	95,959	80,462
WEST	6,657	16,666	39,295
MISCELLANEOUS MARKETS	6,606	18,109	20,847



### NORTH DAKOTA HARD RED SPRING WHEAT SHIPMENTS BY RAIL AND TRUCK AND DESTINATION

# NORTH DAKOTA HARD RED SPRING WHEAT SHIPMENTS BY RAIL AND TRUCK AND DESTINATION

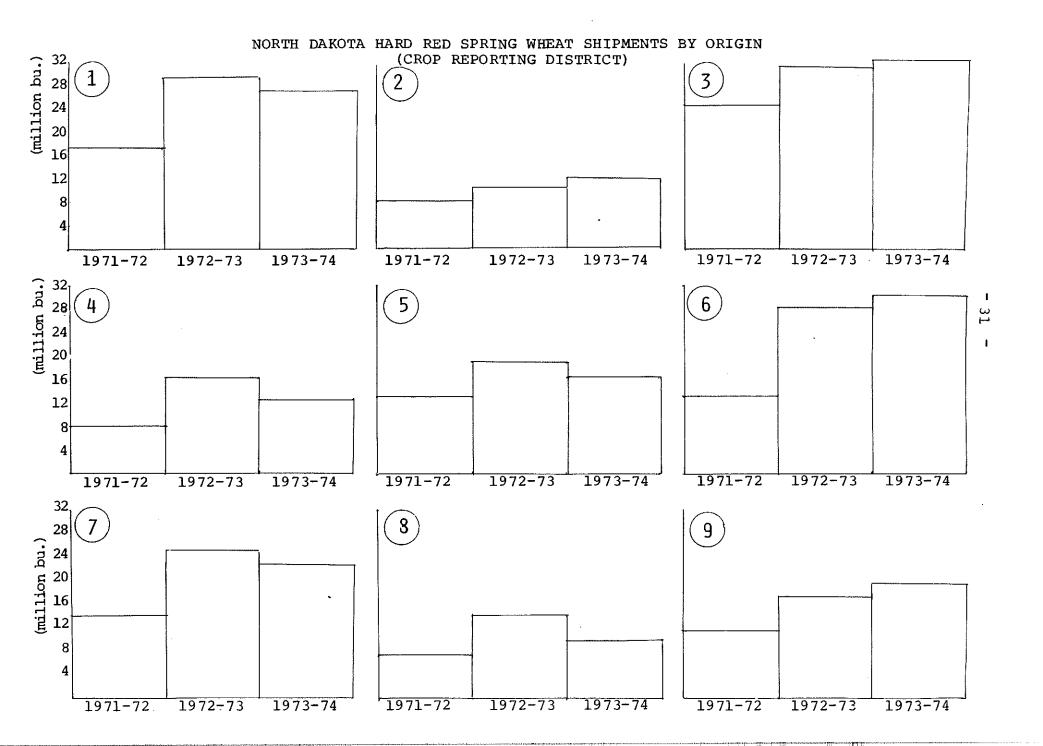
	1971-72		1972	1972-73		1973-74	
DESTINATION	RAIL	TRUCK	RAIL	TRUCK	RAIL	TRUCK	
(thousand bu.)							
MINNST. PAUL	32,579	15,400	46,459	14,504	27,760	15,202	
DULUTH-SUPERIOR	38,148	20,554	80,636	15,323	57 <b>,</b> 777	22,685	
WEST	6,541	116	16,344	322	38,032	1,263	
MISC. MARKETS	5,210	1,396	14,738	3,371	17,759	3,088	

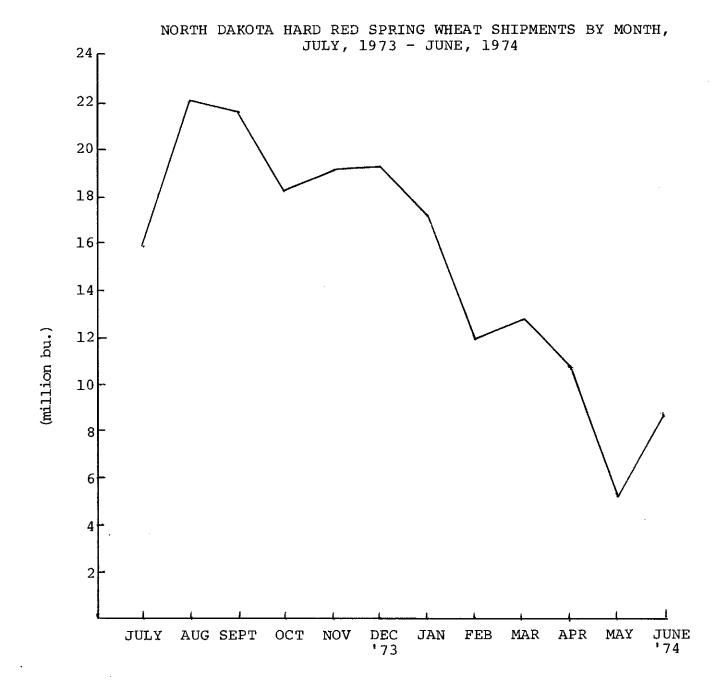


### NORTH DAKOTA HARD RED SPRING WHEAT SHIPMENTS BY ORIGIN (CROP REPORTING DISTRICT)

## NORTH DAKOTA HARD RED SPRING WHEAT SHIPMENTS BY ORIGIN (CROP REPORTING DISTRICT)

CROP REPORTING DISTRICT	1971-72	1972-73	1973-74
	(thous	and bu )	
1	17,827	and bu.)	26,866
2	8,799	11,142	12,282
3	25,063	31,560	32,677
4	8,070	16,223	12,687
5	13,421	18,739	16 <b>,</b> 569
6	13,493	28,261	30,288
7	13,940	25,109	22,596
8	7,691	13,962	9,911
9	11,642	17,325	19,693

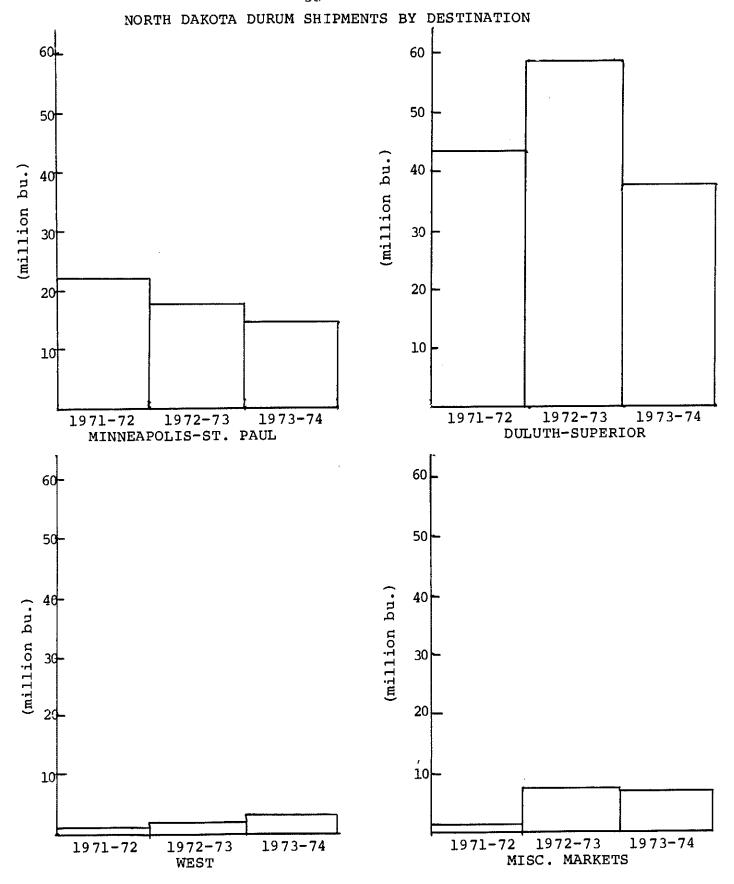




### NORTH DAKOTA DURUM SHIPMENTS BY DESTINATION

#### NORTH DAKOTA DURUM SHIPMENTS BY DESTINATION

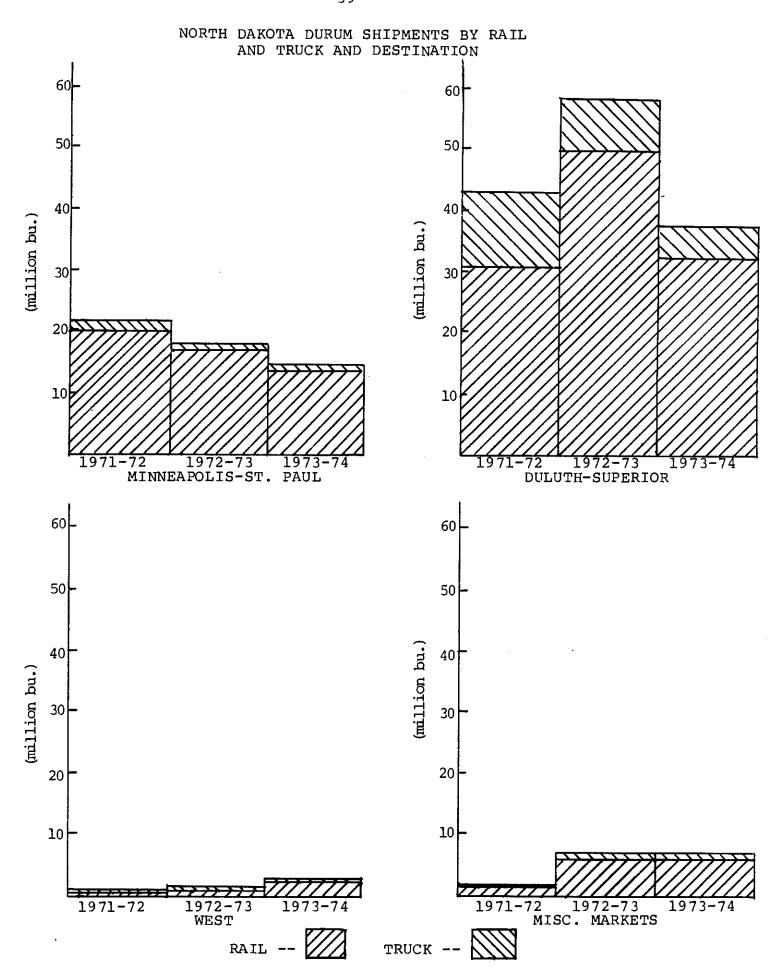
DESTINATION	1971-72	1972-73	1973-74
	(thou	sand bu.)	,
MINNEAPOLIS-ST. PAUL	21,557	17,472	14,145
DULUTH-SUPERIOR	42,990	58,343	37,686
WEST	357	<b>7</b> 05	2,132
MISCELLANEOUS MARKETS	1,280	6,832	6,794



### NORTH DAKOTA DURUM SHIPMENTS BY RAIL AND TRUCK AND DESTINATION

#### NORTH DAKOTA DURUM SHIPMENTS BY RAIL AND TRUCK AND DESTINATION

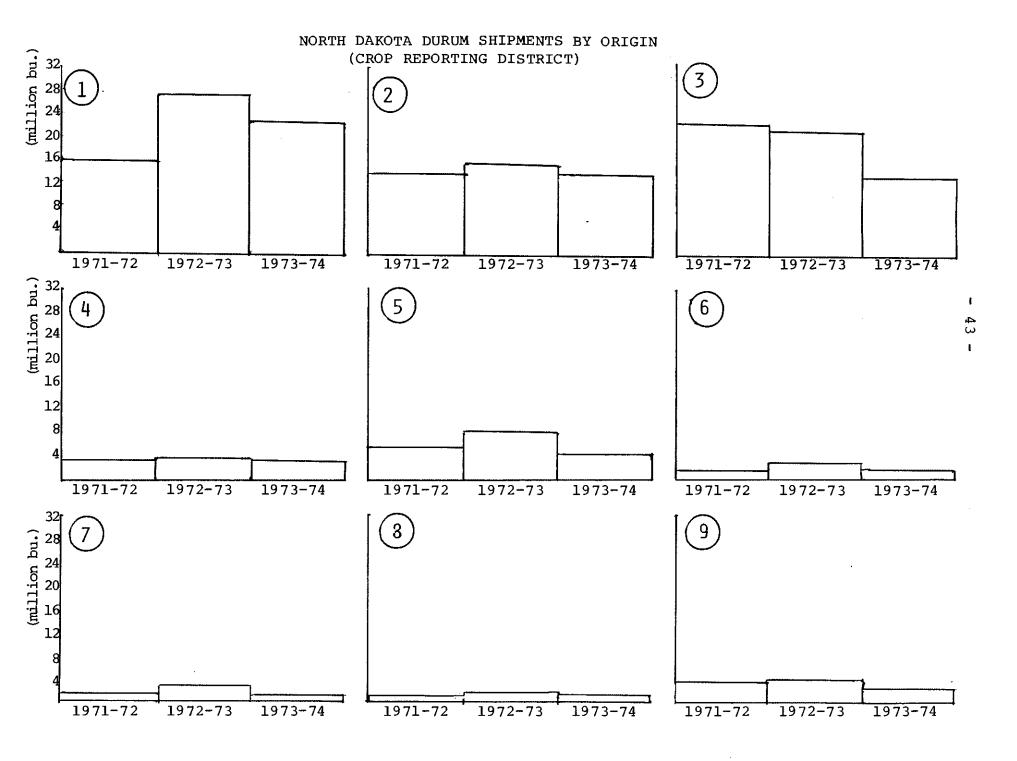
	197	1-72	1972	2-73	1973	3-74
DESTINATION	RAIL	TRUCK	RAIL	TRUCK	RAIL	TRUCK
		W.W	(thousand bu.	)		
MINNST. PAUL	20,022	1,535	16,504	968	12,897	1,248
DULUTH-SUPERIOR	30,641	12,349	50,426	7,917	33,459	4,227
WEST	327	30	608	97	1,867	265
MISC. MARKETS	831	449	5,780	1,052	5,031	1,763

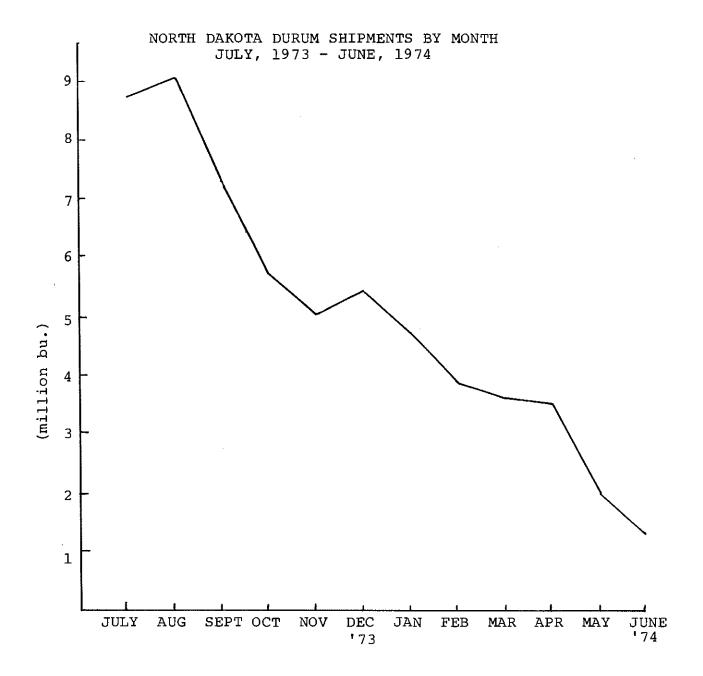


# NORTH DAKOTA DURUM SHIPMENTS BY ORIGIN (CROP REPORTING DISTRICT)

# NORTH DAKOTA DURUM SHIPMENTS BY ORIGIN (CROP REPORTING DISTRICT)

CROP REPORTING DISTRICT	1971-72	1972-73	1973-74
	(thousa	and bu.)	
1	15,632	26,658	22,133
2	13,548	15,105	12,910
3	22,398	21,142	13,787
4	2,951	3,770	2,829
5	5,384	7,698	4,139
6	1,611	2,305	1,192
7	1,257	2,236	1,331
8	504	951	444
9	2,899	3,487	1,991



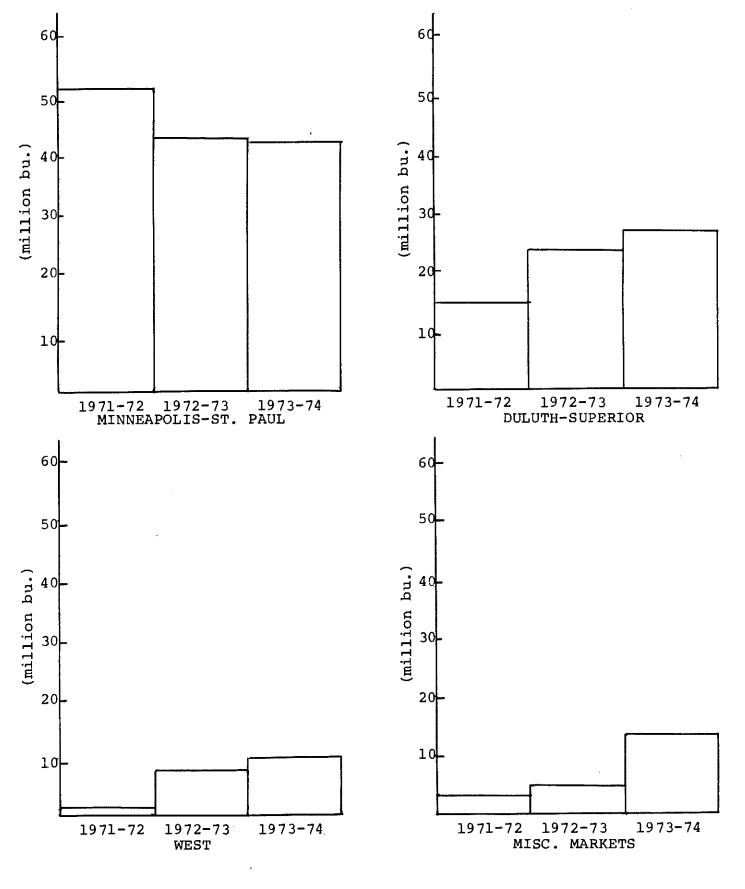


## NORTH DAKOTA BARLEY SHIPMENTS BY DESTINATION

### NORTH DAKOTA BARLEY SHIPMENTS BY DESTINATION

DESTINATION	1971-72	1972-73	1973-74
	(tho	usand bu.)	
MINNEAPOLIS-ST. PAUL	50,706	42,803	42,244
DULUTH-SUPERIOR	14,239	23,799	26,659
WEST	572	7,545	9,858
MISCELLANEOUS MARKETS	2,919	4,236	12,977

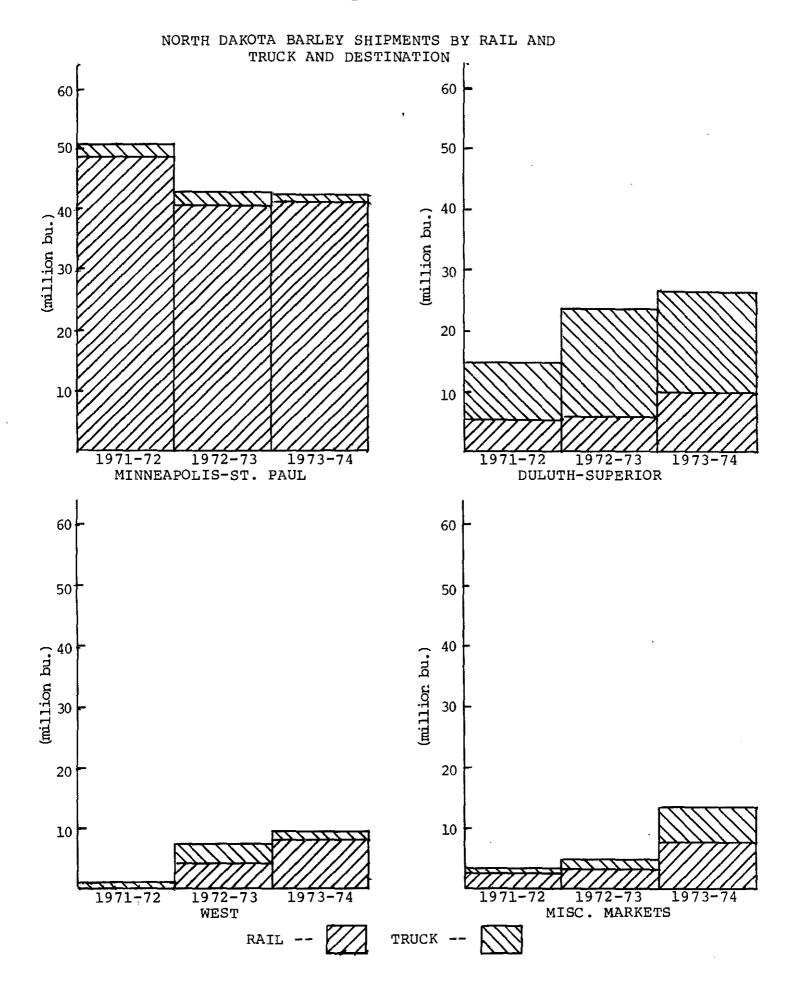
### NORTH DAKOTA BARLEY SHIPMENTS BY DESTINATION



### NORTH DAKOTA BARLEY SHIPMENTS BY RAIL AND TRUCK AND DESTINATION

### NORTH DAKOTA BARLEY SHIPMENTS BY RAIL AND TRUCK AND DESTINATION

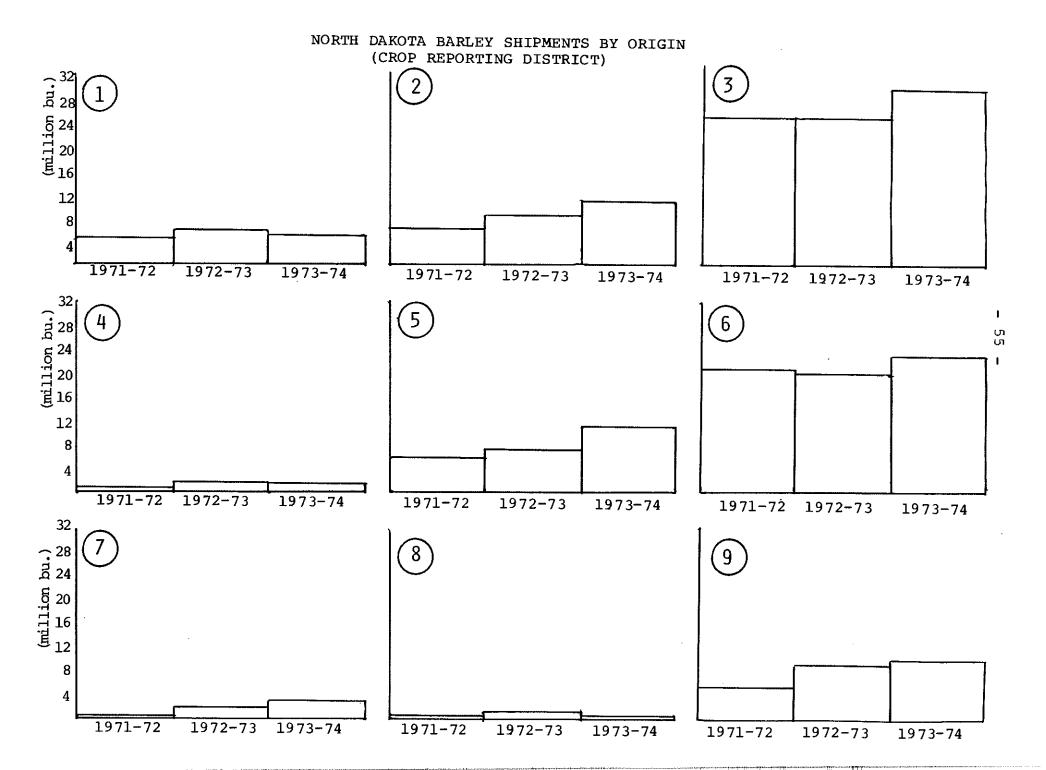
	1971	72	197	2-73	1973	3-74
DESTINATION	RAIL	TRUCK	RAIL	TRUCK	RAIL	TRUCK
		- (t	housand bu.)			
MINNST. PAUL	48,934	1,772	40,575	2,228	40,905	1,339
DULUTH-SUPERIOR	4,403	9,836	4,767	19,032	9,230	17,429
WEST	24	548	3,878	3,667	7,030	2,828
MISC. MARKETS	2,071	848	2,182	2,054	6,857	6,120

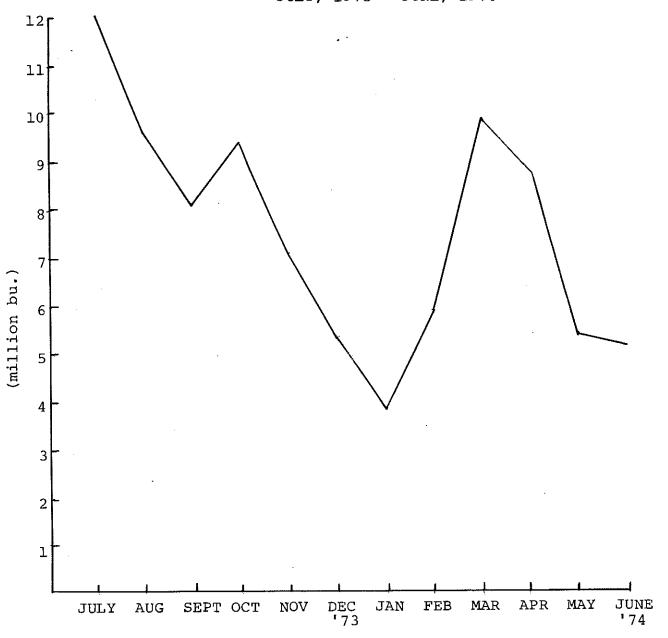


# NORTH DAKOTA BARLEY SHIPMENTS BY ORIGIN (CROP REPORTING DISTRICT)

NORTH DAKOTA BARLEY SHIPMENTS
BY ORIGIN (CROP REPORTING DISTRICT)

CROP REPORTING DISTRICT	1971-72	1972-73	1973-74
1	(thou	sand bu.)	
1	4,539	5,784	4,778
2	6,091	8,192	10,440
3	24,831	24,874	29,933
4	572	1,422	1,276
5	5,801	6,943	11,024
6	20,485	19,820	22,376
7	531	1,939	2,559
8	313	994	524
9	5,279	8,416	8,828



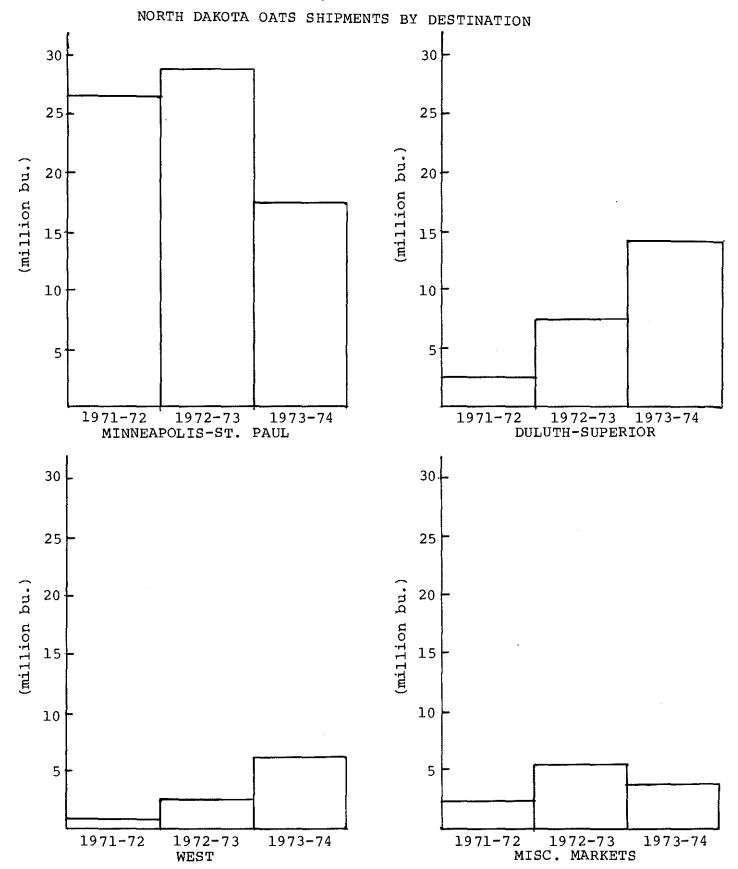


56

# NORTH DAKOTA OATS SHIPMENTS BY DESTINATION

### NORTH DAKOTA OATS SHIPMENTS BY DESTINATION

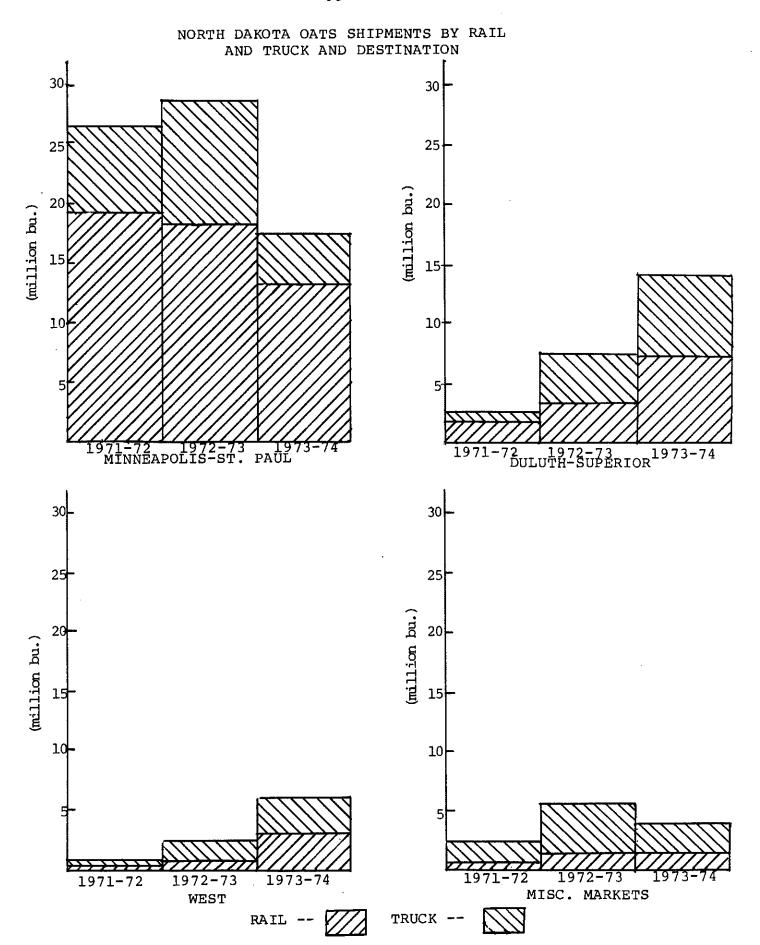
			···
DESTINATION	1971-72	1972-73	1973-74
	(tho:	usand bu.)	<u>,</u>
MINNEAPOLIS-ST. PAUL	26,630	28,784	17,362
DULUTH-SUPERIOR	2,471	7,475	14,020
WEST	797	2,390	6,086
MISCELLANEOUS MARKETS	2,111	5,572	3,870



# NORTH DAKOTA OATS SHIPMENTS BY RAIL AND TRUCK AND DESTINATION

NORTH DAKOTA OATS SHIPMENTS BY RAIL AND TRUCK AND DESTINATION

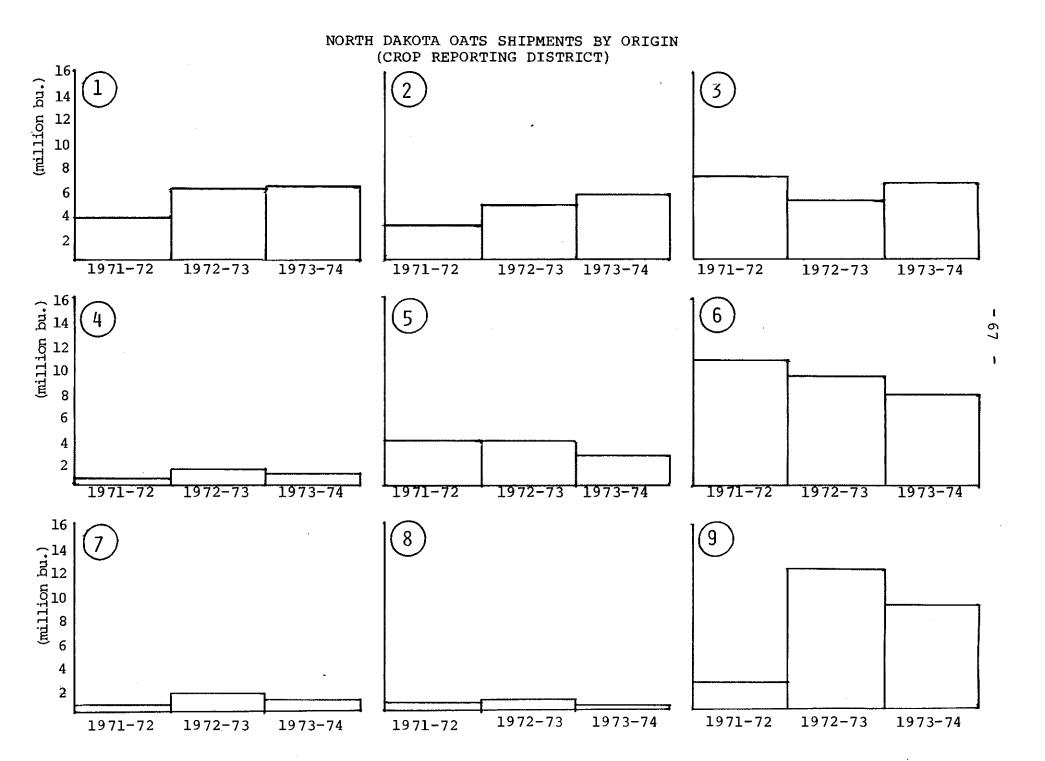
	1971-72		1972-73		1973	1973-74	
DESTINATION	RAIL	TRUCK	RAIL	TRUCK	RAIL	TRUCK	
			(thousand bu.)				
MINN ST. PAUL	19,377	7,253	18,026	10,758	13,306	4,056	
DULUTH-SUPERIOR	1,408	1,063	3,199	4,276	7,189	6,831	
WEST	164	633	508	1,882	2,754	3,332	
MISC. MARKETS	669	1,442	1,107	4,465	1,114	2,756	

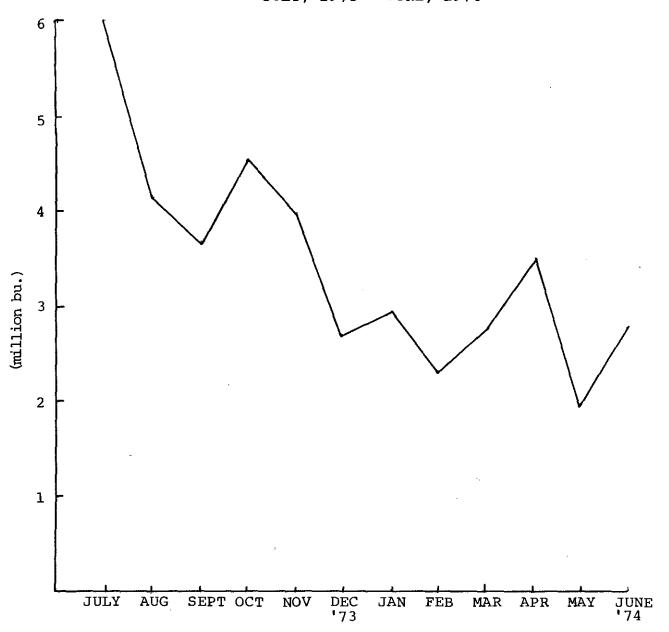


# NORTH DAKOTA OATS SHIPMENTS BY ORIGIN (CROP REPORTING DISTRICT)

#### NORTH DAKOTA OATS SHIPMENTS BY ORIGIN (CROP REPORTING DISTRICT)

CROP REPORTING DISTRICT	1971-72	1972-73	1973-74
1	(thous	sand bu.) 5,777	5,849
2	3,147	4,710	5,514
3	7,055	5,128	6,401
4	465	1,389	1,188
5	3,913	3,833	2,783
6	10,492	9,180	7,625
7	444	1,323	1,688
8	785	908	447
9	2,381	11,974	8,943



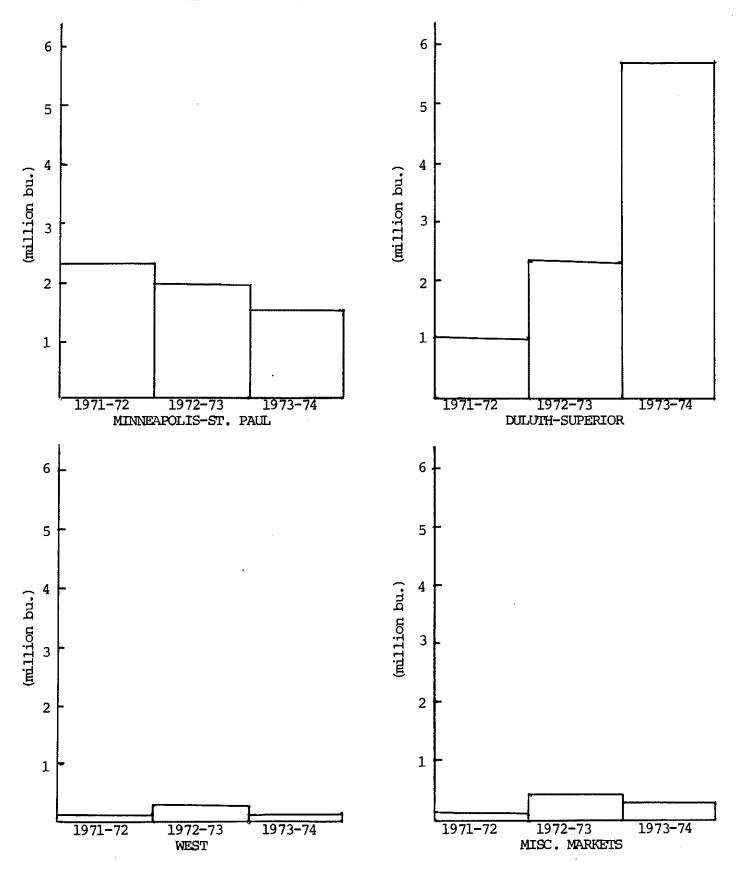


## NORTH DAKOTA RYE SHIPMENTS BY DESTINATION

### NORTH DAKOTA RYE SHIPMENTS BY DESTINATION

DESTINATION	1971-72	1972-73	1973-74
	(thous	sand bu.)	
MINNEAPOLIS-ST. PAUL	2,371	2,012	1,561
DULUTH-SUPERIOR	1,061	2,288	5,730
WEST	162	272	150
MISCELLANEOUS MARKETS	107	437	280

#### NORTH DAKOTA RYE SHIPMENTS BY DESTINATION

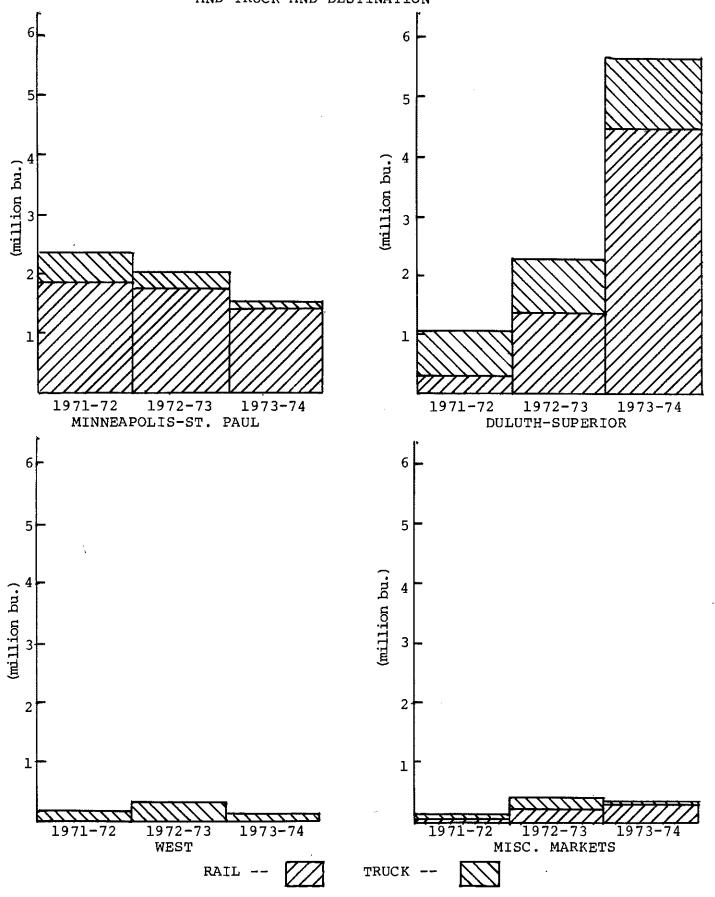


### NORTH DAKOTA RYE SHIPMENTS BY RAIL AND TRUCK AND DESTINATION

NORTH DAKOTA RYE SHIPMENTS BY RAIL AND TRUCK AND DESTINATION

	1971-72		1972	1973	1973-74	
DESTINATION	RAIL	TRUCK	RAIL	TRUCK	RAIL	TRUCK
	,	· · · · · · · · · · · · · · · · · · ·	(thousand bu.)			
MINNST. PAUL	1,868	503	1,705	30 7	1,406	155
DULUTH-SUPERIOR	232	829	1,291	897	4,584	1,146
WEST	0	162	5	267	7	143
MISC. MARKETS	33	74	151	286	201	79

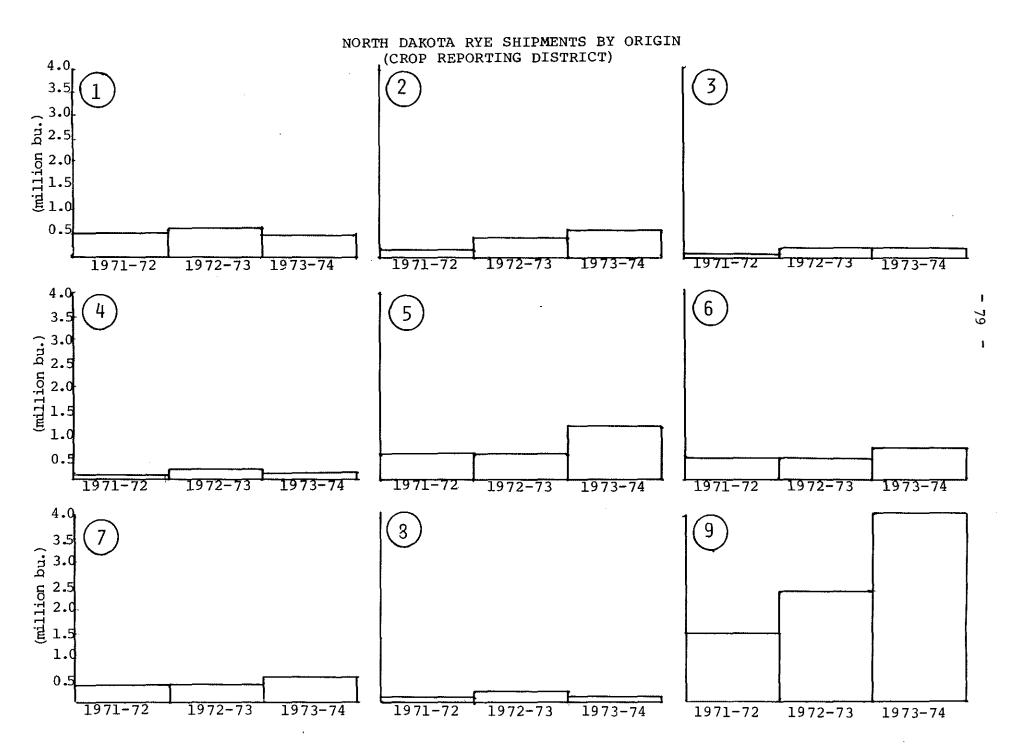
# NORTH DAKOTA RYE SHIPMENTS BY RAIL AND TRUCK AND DESTINATION

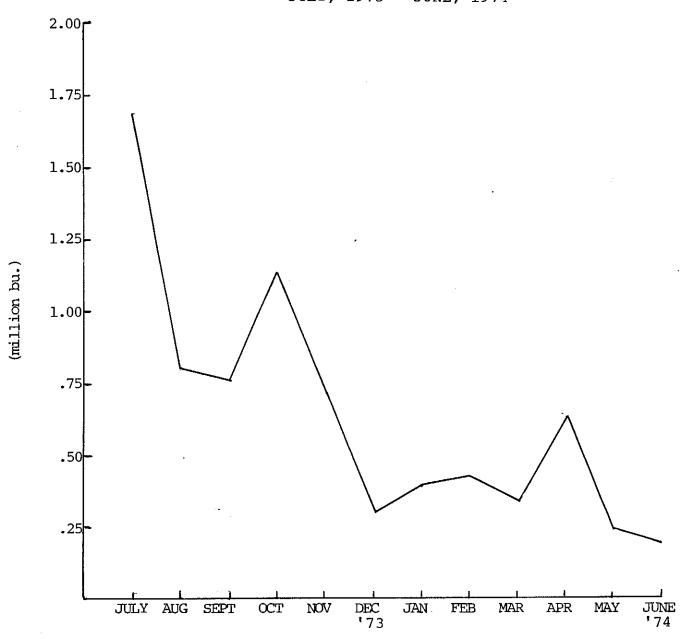


# NORTH DAKOTA RYE SHIPMENTS BY ORIGIN (CROP REPORTING DISTRICT)

### NORTH DAKOTA RYE SHIPMENTS BY ORIGIN (CROP REPORTING DISTRICT)

1971-72	1972-73	1973-74
(thous	sand bu.) 549	449
133	357	531
83	161	134
92	150	127
512	509	1,144
465	377	605
298	369	477
109	225	154
1,457	2,312	. 4,102
	551 133 83 92 512 465 298 109	551 (thousand bu.) 549 133 357 83 161 92 150 512 509 465 377 298 369 109 225



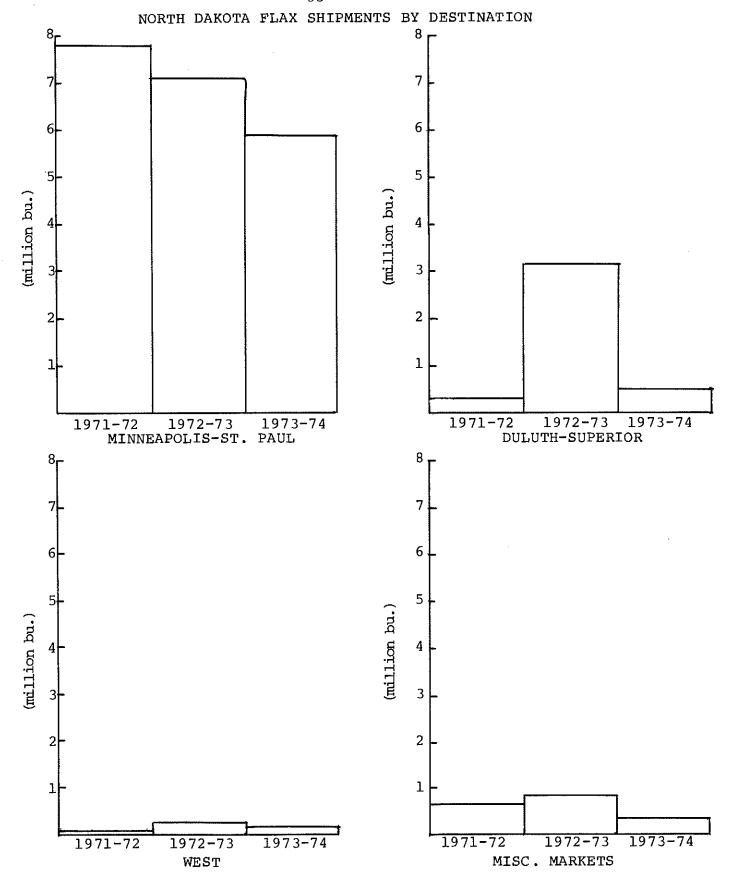


. 80 -

## NORTH DAKOTA FLAX SHIPMENTS BY DESTINATION

#### NORTH DAKOTA FLAX SHIPMENTS BY DESTINATION

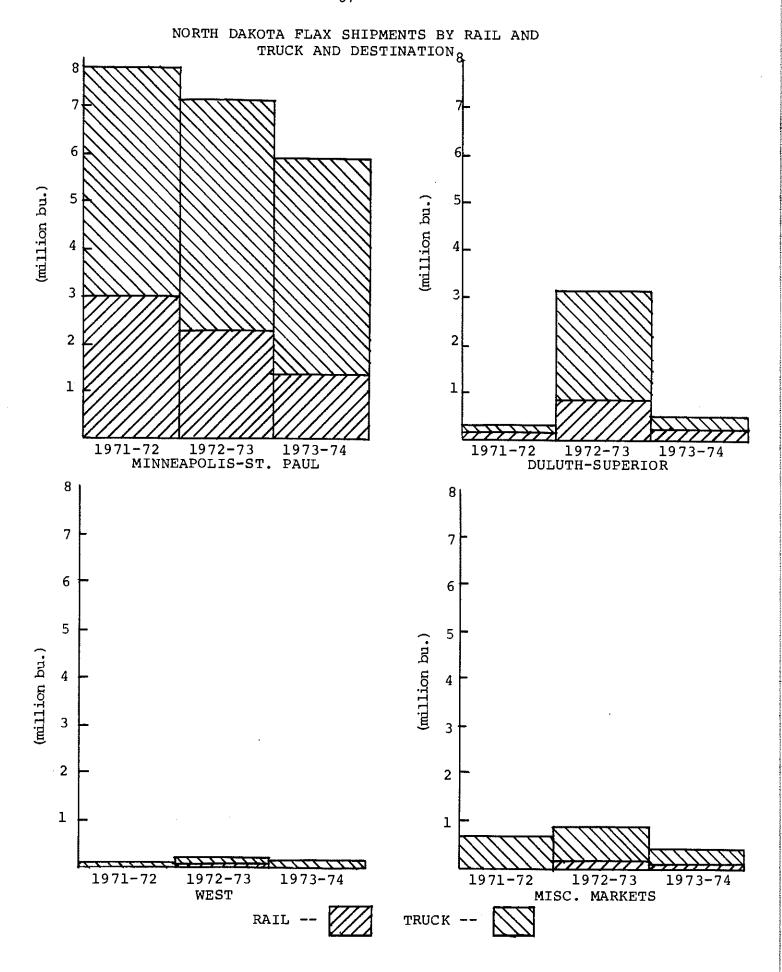
DESTINATION	1971-72	1972-73	1973-74
	(thou	sand bu.)	***************************************
MINNEAPOLIS-ST. PAUL	7,841	7,169	5,891
DULUTH-SUPERIOR	306	3,190	524
WEST	78	232	91
MISCELLANEOUS MARKETS	671	820	365



## NORTH DAKOTA FLAX SHIPMENTS BY RAIL AND TRUCK AND DESTINATION

NORTH DAKOTA FLAX SHIPMENTS BY RAIL AND TRUCK AND DESTINATION

	1971-72		1972	1972-73		1973-74	
DESTINATION	RAIL	TRUCK	RAIL	TRUCK	RAIL	TRUCK	
	·	(t	housand bu	.)		· · · · · · · · · · · · · · · · · · ·	
MINNST. PAUL	2,983	4,858	2,263	4,906	1,390	4,501	
DULUTH-SUPERIOR	112	194	814	2,376	195	329	
WEST	0	78	21	211	0	91	
MISC. MARKETS	5	566	86	734	. 62	303	



## NORTH DAKOTA FLAX SHIPMENTS BY ORIGIN (CROP REPORTING DISTRICT)

NORTH DAKOTA FLAX SHIPMENTS
BY ORIGIN (CROP REPORTING DISTRICT)

CROP REPORTING DISTRICT	1971-72	1972-73	1973-74
1	(thous	and bu.) 527	652
2	1,119	1,468	1,271
3	779	962	1,011
4	365	750	339
5	1,321	2,278	1,061
6	1,403	1,571	900
7	265	74	67
8	918	975	261
9	2,055	2,806	1,309

