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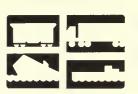
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Impact of Production Changes on Corn Movements

Among Selected States 1982-1983

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Southern Cooperative Series Bulletin 351 University of Illinois Bulletin 796 Illinois Agricultural Experiment Station Urbana-Champaign, Illinois



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This bulletin is one in a series of North Central and Southern Cooperative bulletins. It represents a contribution to Southern Regional Project S-176, "Interregional Marketing Systems for Grains and Soybeans." The Illinois Agricultural Experiment Station is the publishing station. Requests for copies of this bulletin may be sent to Office of Agricultural Communications and Education, 67 Mumford Hall, 1301 West Gregory Drive, University of Illinois, Urbana, Illinois 61801.

Abstract

In general, changes in the quantity of grain harvested between 1982 and 1983 were offset by changes in inventory. Relatively fixed demands in normally deficit states resulted in an increased volume of receipts and transportation by rail and truck. Percentage changes in volume shipped were less than percentage changes in production in most surplus states. Transportation requirements per bushel of grain produced increased with the reduced quantity harvested in 1983 because deficit states required additional supplies that were transported from more distant sources of supply.

Preface

This bulletin reports the results of research conducted by the Southern Regional Research Committee S-176, "Interregional Marketing Systems for Grains and Soybeans." This research, initiated by the S-176 Committee, involved collection of grain flow data in nine states represented by members of the Committee.

This bulletin is one of a series of regional bulletins resulting from the research. Grain flow data were collected for five grains (corn, soybeans, wheat, oats, and sorghum) for 1985 and for three grains (corn, soybeans, and wheat) for the years 1982 and 1983. Each bulletin in the series reports data for one grain. The data were summarized and the survey coordinated under the supervision of Joseph E. Vercimak in the Department of Agricultural Economics, University of Illinois at Urbana-Champaign.

The work in this bulletin was completed under the supervision of a Grain Flow Subcommittee of the S-176 Technical Committee. The members of that subcommittee were Lowell D. Hill and Joseph E. Vercimak, University of Illinois; T. Q. Hutchinson, U.S. Department of Agriculture; Jeffrey E. Jordan, University of Georgia; and Albert J. Allen, Mississippi State University. The success of this project, however, is also due to the cooperation of over 900 grain marketing firms and the efforts of researchers in all participating states.

The research was funded in part by the Federal Railroad Administration under contract No. DTFR 53-84-C-00036; the Agricultural Marketing Serivce, USDA; the Agricultural Cooperative Service, USDA; the Illinois Department of Agriculture; and the Soo Line Railroad. Administration of the grant funds was coordinated by Joseph E. Vercimak.

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The authors wish to acknowledge the contributions of Joe Vercimak for his leadership in collecting and processing the 1982-83 grain flow information. The authors also wish to thank Debra Edinger for typing the numerous revisions of the draft of this and the other grain flow publications. We express special appreciation to the following Research Assistants: Karen Bender, Daniel Marriott, Shailendra Pradhan, Brian Anderson, and Jeffrey Austman, who spent many hours checking, reconciling, and correcting the thousands of data entries required for the final tables in this report. Albert Allen, Eric Wailes, and Stephen Ott served as the review committee, as the publications moved through the various revisions.

Contents

Purpose of the Study	1
Methodology	1
Corn Production and Supply	3
Corn Shipments and Receipts	7
Corn Shipments and Receipts in the Nine-State Region	12
Supplemental Analysis of Non-Participating States	17
Summary and Conclusions	18
Bibliography	21
Appendix	23

Figures and Tables

Tables

1.	Corn Supply and Disappearance in the United States for Marketing Years from 1976 to 1987
2.	Corn Production by Region and States, 1982 and 19834
3.	Corn Supply by State for the Nine-State Area, 1982 and 19836 $$
4.	Interstate Corn Receipts in Selected States, 1982 and 19837
5.	Interstate Corn Receipts in Selected States by Mode of Transport, 19828
6.	Interstate Corn Receipts in Selected States by Mode of Transport, 19838
7.	Interstate Corn Shipments in Selected States, 1982 and 19839
8.	Interstate Corn Shipments in Selected States by Mode of Transport, 1982
9.	Interstate Corn Shipments in Selected States by Mode of Transport, 198310
10.	State Shares of Port Receipts of Corn, 1982 and 198311
11.	Corn Receipts at Port Regions by State of Origin, 1982 and 1983
12.	Corn Inspected for Export by Region and Port Area, 1982 and 198315

Appendix Tables

Receipts and Shipments of Corn by State, 1982-83

Appendix A

1982 and 1983 Receipts and Shipments of Corn by State for the 9 States

A-1. Alabama, 198223
A-2. Arkansas, 198224
A-3. Georgia, 198224
A-4. Illinois, 198225
A-5. Kentucky, 1982
A-6. Louisiana, 1982 26
A-7. Mississippi, 198227
A-8. Ohio, 1982
A-9. Tennessee, 1982
A-10. Alabama, 1983 28
A-11. Arkansas, 198329
A-12. Georgia, 1983
A-13. Illinois, 1983 30
A-14. Kentucky, 1983 31
A-15. Louisiana, 1983 31
A-16. Mississippi, 1983
A-17. Ohio, 1983
A-18. Tennessee, 1983
Appendix B
1982 Receipts and Shipments of Corn by

State for All States (F	Rail and Barge Only)
B-1. Alabama, 1982	34
B-2. Arizona, 1982	35
B-3. Arkansas, 1982	35
B-4. California, 1982	36
B-5. Florida, 1982	36
B-6. Georgia, 1982	37
B-7. Illinois, 1982	37
B-8. Indiana, 1982	38
B-9. Iowa, 1982	38
B-10. Kansas 1982	.39

B-11. Kentucky, 198239

B-12. Louisiana, 198240
B-13. Maryland, 198240
B-14. Michigan, 198240
B-15. Minnesota, 198241
B-16. Mississippi, 198241
B-17. Missouri, 198242
B-18. Nebraska, 198242
B-19. North Carolina43
B-20. North Dakota43
B-21. Ohio, 198244
B-22. Oklahoma, 198244
B-23. Pennsylvania, 198244
B-24. South Carolina, 198245
B-25. South Dakota, 198245
B-26. Tennessee, 198246
B-27. Texas, 198246
B-28. Virginia, 198247
B-29. Washington, 198247
B-30. Wisconsin, 198248
B-31. California Ports, 198248
B-32. Chicago/Duluth Ports, 198248
B-33. Eastern Gulf Ports, 198249
B-34. Louisiana Gulf Ports, 198249
B-35. North Atlantic Ports, 198249
B-36. Pacific Northwest Ports, 198249
B-37. South Atlantic Ports, 198250
B-38. Texas Gulf Ports, 198250
B-39. Toledo Port Area, 198250
Appendix C
1983 Receipts and Shipments of Corn by
State for All States (Rail and Barge Only)
C-1. Alabama, 1983 51
C-2. Arizona, 198352
C-3. Arkansas, 198352
C-4. California, 198353
C-4. California, 1983
C-4. California, 1983. 53 C-5. Delaware, 1983. 53 C-6. Florida, 1983. 54 C-7. Georgia, 1983. 54
C-4. California, 1983

C-9. Illulalia, 1905	50
C-10. Iowa, 1983	57
C-11. Kansas, 1983	58
C-12. Kentucky, 1983	58
C-13. Louisiana, 1983	59
C-14. Maryland, 1983	59
C-15. Michigan, 1983	60
C-16. Minnesota, 1983	60
C-17. Mississippi, 1983	61
C-18. Missouri, 1983	61
C-19. Nebraska, 1983	62
C-20. North Carolina, 1983	62
C-21. North Dakota, 1983	63
C-22. Ohio, 1983	63
C-23. Oklahoma, 1983	63
C-24. Pennsylvania, 1983	64
C-25. South Carolina, 1983	64
C-26. South Dakota, 1983	65
C-27. Tennessee, 1983	65
C-28. Texas, 1983	66
C-29. Virginia, 1983	66
C-30. Washington, 1983	67
C-31. Wisconsin, 1983	67
C-32. California Ports, 1983	68
C-33. Chicago/Duluth Ports, 1983	68
C-34. Eastern Gulf Ports, 1983	68
C-35. Louisiana Gulf Ports, 1983	68
C-36. North Atlantic Ports, 1983	69
C-37. Pacific Northwest Ports, 1983	69
C-38. South Atlantic Ports, 1983	69
C-39. Texas Gulf Ports, 1983	69
C-40. Toledo Port Area, 1983	70



Impact of Production Changes on Corn Movements

Among Selected States, 1982-1983

Purpose of the Study

Introduction

Although there is considerable information available regarding the production and use of corn in the United States, there is less information available concerning corn movement and the importance of each transportation mode. Data on corn movements by mode of transportation provide crucial input for the decisions made by private industry. Private firms need to know the history of grain flows in order to make sound decisions about investing or dis-investing in grain handling capacity.

Corn movement data are also important for government officials, who need to know current patterns of transportation to judge how changes in government policies and regulations could affect various regions of the country. While government policies to reduce total production in the United States have been in operation for many years, their effects on transportation requirements and direction of grain movements are difficult to assess because many other factors also enter into the determination of the marketing channel. Changes in government programs often result in relatively small changes in total production because, in many cases, changes in yield have offset changes in acreage. Changes in production can also be offset by changes in inventories held by government or private firms. As a result, it is difficult to match changes in origins, destinations, and modes of transport with any particular policy.

All of these factors were involved in 1983 when a drought and the Payment-in-Kind (PIK) program combined to reduce corn production to its lowest level in eleven years. The dramatic change in production between 1982 and 1983 provided an opportunity to evaluate shifts in destinations and mode of transport as the industry adapted to the reduced volume.

Nine states were selected for the comparative analysis using a survey of grain handlers for calendar years 1982 and 1983. States participating in the survey were Alabama, Arkansas, Georgia, Illinois, Kentucky, Louisiana, Mississippi, Ohio, and Tennessee. Each of these states is a member of the Southern Regional Research Committee S-176, "Interregional Marketing Systems for Grains and Soybeans."

Objectives

The overall objective of this study was to analyze the transportation of corn from origins in selected states to destinations during 1982 and 1983. The specific objectives of this study were to ascertain:

- (1) the volume of corn moved between various origins and destinations during 1982 and 1983:
- (2) the market share of each transportation mode employed in moving this corn;
- (3) the effect of changes in corn production and supply on shipment patterns.

Methodology

For sampling purposes, grain handling firms were categorized according to function. Categories included inland grain elevators, export elevators, river elevators, feed firms, corn processors, corn wet millers, corn dry millers, flour millers, and other firms. For descriptive purposes, elevators were further classified as country, terminal, or subterminal elevators. Feed firms were further classified as feed processors, feed mills, feedlots, or poultry operations.

The population of grain firms included all domestic facilities handling unprocessed grain after leaving the farm gate. The identification of a specific grain flow ended when the grain was processed, fed, or exported. For example, a feed processor was considered as a final destination for grain pro-

cessed into feed and no attempt was made to identify grain movements after the grain was processed or exported.

Listings of firms by size (i.e., storage capacities, processing capacities, etc.) revealed a skewed distribution for various firm categories in most states. In these cases, a relatively small percentage of firms handled a relatively large proportion of the volume. Where the number of firms in a particular firm class was small, the sampling rate was 100 percent. Where the population contained a small group of high volume handlers or processors, the high volume group was sampled at a rate of 100 percent. Sampling rates for the remaining firms in a size category varied from 10 to 25 percent. Each state participant had the flexibility to increase sampling rates as conditions warranted.

Sample Expansion

Estimates of grain movements for each state as a whole were obtained by expanding each sample observation by an appropriate multiplier. A multiplier of 4.0, for example, was used to expand a sample of firms selected at a rate of 25 percent for a particular population strata. Likewise, a multiplier of 1.0 was used where firms in a particular size or geographic group were sampled at a rate of 100 percent.

Data Reconciliation Procedures

After survey data were compiled and tabulated, a procedure for cross-checking grain flows was devised in order to provide consistent estimates of state-to-state flows. Due to errors of sampling, estimation, or expansion, survey data from the shipping state did not always agree with the volume data estimated from the survey in the receiving state. In general, estimates obtained from the shipping state were more accurate since receivers (i.e., processors and exporters) often had less information regarding the origins of their grain. This was especially true where grain

was purchased through a broker. For truck movements of grain, researchers reconciled the differences between the quantity shipped and the quantity received by utilizing survey data from each state and researchers' knowledge about shipping patterns, price relationships, and production-utilization balances.

Secondary sources of information were available for rail and barge movements between states. Estimates of state-to-state grain movements by water were provided by the Army Corps of Engineers. Estimates of state-to-state grain movements by rail were provided by the carload waybill sample drawn by the Interstate Commerce Commission.

The procedure for reconciling barge and rail grain movements involved comparing shipments reported by the Corps of Engineers on inland waterways and waybill sample statistics for railroads, with data received from interviews. In some cases, secondary data provided additional support for survey estimates. In other cases, secondary data provided a useful compromise where survey figures varied widely.

Other important secondary data sources were the estimates of "exportable surpluses" produced in each state. Each state's representative provided information about production, consumption, inventory change, and the remaining surplus or deficit available to be exported or imported by the state. Because much of this information, especially about consumption, was based on estimates, the numbers were not expected to equal those obtained from the survey. The "production/utilization" estimates provided researchers with a comparison of the quantity of grain available to be exported from a state with survey estimates of outbound shipments. Estimates of production and utilization are available from Wailes and Vercimak (Wailes and Vercimak, 1988).

Comparisons among the various data sources increased the confidence in estimates obtained from sampling the population of grain handling firms. The logic and consistency of each flow summarized in this report have been checked by each state representative conducting the survey.

Corn Production and Supply

The reduced corn production in 1983 due to adverse weather conditions and the government's Payment-in-Kind program (PIK) provided a contrast between 1982 and 1983. In 1982, total U.S. corn production was 8.2 billion bushels, while production in 1983

was 4.2 billion bushels. The small 1983 corn crop was augmented by 2.5 billion bushels released from stocks, but supplies in 1983 were still dramatically smaller than in 1982 (Table 1).

The decrease in production was not uniformly spread throughout the United States. Although every state except Louisiana and Wyoming showed a decrease in production, the percentage of decrease ranged from a low of 2 percent in Arkansas to a high of 74 percent in Virginia (Table 2). Among the main producing states, primarily those located in the Lake,

Table 1. Corn Supply and Disappearance in the United States for Marketing Years from 1976 to 1987.

3.6 3.4 .37		Supply			Disappearance			
Marketing Year Beginning September 1	Stocks	Production	Imports	Total Supply	Food, Alc. & Indust.	Seed, Feed & Resid.	Export	Total
				milli	ons of bushels			
1976/77	633.2	6,289.2	2.5	6,924.9	522.1	3,610.5	1,656.7	5,789.3
1977/78	1,135.6	6,505.0	2.6	7,643.2	561.5	3,736.7	1,909.1	6,207.3
1978/79	1,435.9	7,267.9	1.3	8,705.1	588.5	4,283.4	2,123.7	6,995.6
1979/80	1,709.5	7,928.1	0.9	9,638.5	619.5	4,569.3	2,415.4	7,604.2
1980/81	2,034.3	6,639.4	1.4	8,675.1	697.8	4,177.3	2,407.9	7,283.0
1981/82	1,392.1	8,118.7	1.1	9,511.9	777.8	4,188.0	2,009.5	6,975.3
1982/83	2,536.6	8,235.1	0.7	10,772.4	880.3	4,535.2	1,833.8	7,249.3
1983/84	3,523.1	4,174.7	2.7	7,700.5	956.0	3,836.7	1,901.5	6,694.2
1984/85	1,006.3	7,674.0	3.5	8,683.8	1,070.0	4,100.2	1,865.4	7,035.6
1985/86	1,648.2	8,876.7	10.6	10,535.5	1,140.0	4,114.8	1,241.2	6,496.0
1986/87	4,039.5	8,249.9	2.1	12,291.5	1,175.0	4,730.4	1,504.4	7,409.8
1987/88	4,881.7	7,072.1	4.0	11,957.8	1,212.0	4,752.2	1,734.5	7,698.7
Minimum	633.2	4,174.7	0.7	6,924.9	522.1	3,610.5	1,241.2	5,789.3
Maximum	4,881.7	8,876.7	10.6	12,291.5	1,212.0	4,752.2	2,415.4	7,698.7
Average	2,164.7	7,252.6	2.8	9,420.0	850.0	4,219.6	1,883.6	6,953.2
Std. Dev.	1,266.4	1,202.5	2.6	1,626.9	245.3	359.3	324.7	546.3

Source: Feed, Situation and Outlook, Economic Research Service, U.S.D.A., FDS-309, February 1989, pp. 29-30.

Table 2. Corn Production by Region and States, 1982 and 1983.

	Production				
Region and State	1982	1983	Percent Change From 1982		
		thousands of bu	ıshels		
Northeast					
Connecticut ¹	•••				
Delaware	18,054	10,875	-39.76		
Maine ¹					
Maryland	65,920	37,060	-43.78		
Massachusetts ¹					
New Hampshire ¹					
New Jersey	11,400	6,120	-46.32		
New York	70,380	54,000	-23.27		
Pennsylvania	126,100	72,450	-42.55		
Rhode Island ¹					
Vermont ¹					
Total	273,800	169,630	-38.05		
Lake States					
Michigan	293,180	165,600	-43.52		
Minnesota	734,500	367,080	-50.02		
Wisconsin	361,800	223,100	-38.34		
**1900119111			-00.04		
Total	1,389,480	755,780	-45.61		
Corn Belt					
Illinois	1,498,640	624,100	-58.36		
Indiana	790,020	340,910	-56.85		
Iowa	1,578,000	743,850	-52.86		
Missouri	198,970	72,930	-63.35		
Ohio	456,000	224,000	-50.88		
Total	4,521,630	2,005,790	-55.64		
Northern Plains					
Kansas	139,080	81,840	-41.16		
Nebraska	748,000	465,600	-37.75		
North Dakota	35,360	29,145	-17.58		
South Dakota	193,680	104,410	-46.09		
Total	1,116,120	680,995	-38.99		
Appalachia					
Kentucky	153,470	46,080	-69.97		
North Carolina	155,430	76,800	-50.59		
Tennessee	56,700	23,040	-59.37		
Virginia	62,620	16,320	-73.94		
West Virginia	7,840	4,680	-40.31		
Total	428,220	162,240	-62.11		
			(Continued)		

Table 2. — Continued Corn Production by Region and States, 1982 and 1983.

		Production	
Region and State	1982	1983	Percent Change From 1982
		thousands of b	ıshels
Southeast	05.000	17.005	00.05
Alabama	25,080	17,995	-28.25
Florida	13,860	8,174	-41.02
Georgia	69,275	55,125	-20.43
South Carolina	33,440	17,050	-49.01
Total	141,655	98,344	-30.57
Delta Area			
Arkansas	2,700	2,640	-2.22
Louisiana	3,200	5,040	57.50
Mississippi	5,580	3,520	-36.92
· ····································			00.02
Total	11,480	11,200	-2.44
Southern Plains			
Oklahoma	4,500	4,144	-7.91
Texas	119,700	104,760	-12.48
Total	124,200	108,904	-12.32
Mountain Region			
Arizona	2,376	2,312	-2.69
Colorado	101,910	74,420	-26.97
Idaho	8,520	7,735	-9.21
Montana	1,400	1,365	-2.50
New Mexico	8,125	7,000	-13.85
Utah	2,006	1,540	-23.23
Wyoming	5,145	7,072	37.45
j 0			07.10
Total	129,482	101,444	-21.65
Pacific Coast			
California	42,900	33,280	-22.42
Oregon	6,240	5,346	-14.33
Washington	24,000	17,600	-26.67
Total	73,140	56,226	-23.13
U.S. Total	8,209,207	4,150,553	-49.44

 $^{^{1}}$ Little or no corn production in the state.

Source: Crop Production, USDA, Crop Reporting Board, Nov. 9, 1984, p. B-1.

Cornbelt, and Northern Plains regions, decreases varied from 63 percent in Missouri to only 18 percent in North Dakota.

Three states included in this study, Kentucky, Illinois, and Ohio, are normally corn-surplus states that ship substantial quantities of corn into the feed deficit areas of the Southeast and Delta states, and provide large volumes for export. These states suffered large reductions in their 1983 corn crop.

Corn production fell by 70 percent in Kentucky, 58 percent in Illinois, 51 percent in Ohio, and 50 percent in Tennessee between 1982 and 1983. In contrast, Arkansas had only a slight decline and Louisiana had a 58 percent increase in production. In 1983, Louisiana attempted to implement a rural development program by subsidizing gasohol. This had some effect on local demands and total disappearance.

Given the corn inventory carried forward to 1983 and the PIK program, which was designed to reduce government grain stocks, corn supply (production plus net releases from stocks) was the most important variable which should have influenced grain marketing. Corn supplies for 1982 and 1983 are shown in Table 3, along with the percentage change between the two years. Notice that releases from stocks tempered the drop in corn production for most states. Corn supply increased in two of the nine states included in this study (Georgia and Ohio), while the fall in supplies varied from 3 percent in Arkansas to 75 percent in Louisiana. Supply changes and production changes were inversely proportional for Georgia, Louisiana, and Ohio. Supply decreases were also much smaller than production decreases for other states, except Arkansas.

Table 3.

Corn Supply by State for the Nine-State Area, 1982 and 1983.^a

State	1982	1983	Percent change from 1982	
	millions	of bushels		
Alabama	28.4	21.8	-25.0	
Arkansas	3.6	3.5	-2.8	
Georgia	63.1	70.6	11.9	
Illinois	1,412.7	1,257.1	-11.0	
Kentucky	152.7	117.9	-22.8	
Louisiana	8.5	2.1	-75.3	
Mississippi	5.7	4.1	-28.1	
Ohio	359.8	411.6	14.4	
Tennessee	52.1	44.3	-15.0	
Total nine states	2,086.6	1,933.3	-7.4	

^a Supply is equal to production plus the net inventory change.

Sources: Crop Production, USDA, Crop Reporting Board, Nov. 9, 1984, p. B-1 and Wailes and Vercimak.

Corn Shipments and Receipts

Total receipts in the nine-state region were virtually unchanged between 1982 and 1983, with increases in some states offset by decreases in others (Table 4). Due to the decline in production, several states, including Arkansas, Illinois, Kentucky, and Tennessee experienced increased receipts. Shipments into these states were required to meet the normal processing demands and the traditional flow of grain into port areas. Ohio receipts were relatively stable at 73 million bushels during both years. The increased receipts in Arkansas, Illinois, Kentucky, and Tennessee were offset by decreased receipts in Alabama, Georgia, Louisiana, and Mississippi.

The mode of transport bringing supplies in from the other states to the nine-state area

shifted between 1982 and 1983. In 1982, 34 percent of the receipts for the nine states came by truck. In 1983, this percentage dropped to 28 percent. Rail's share remained relatively constant (53 percent in 1982 and 54 percent in 1983), while barge's share increased from 13 percent to nearly 18 percent between the two years (Tables 5 and 6).

Many of these receipts originated in a state other than the nine states in the study. Nearly all of the normally feed-deficit states in the South increased their receipts by barge in 1983. For example, Alabama had a marked increase in barge receipts from 26.5 million bushels to 37.5 million bushels.

Interstate shipments included shipments by the nine-state area to all states plus port areas in the United States. Therefore, total shipments exceeded total nine-state receipts (Tables 4 and 7). In contrast to receipts,

Table 4.	
Interstate Corn Receipts in Selected States, 1982 a	nd 1983.a

	Total	Percent change			
Receiving State	1982 1983				
	thousands of bushels				
Alabama	70,546	66,252	-6.09		
Arkansas	85,722	96,804	12.93		
Georgia	88,561	63,229	-28.60		
Illinois	58,540	80,579	37.65		
Kentucky	11,017	18,117	64.45		
Louisiana	24,446	17,775	-27.29		
Mississippi	51,698	37,308	-27.83		
Ohio	73,170	73,686	0.71		
Tennessee	69,594	82,115	17.99		
Total nine states	533,294	535,865	0.48		

^a Receipts at ports are not included.

Table 5. Interstate Corn Receipts in Selected States by Mode of Transport, 1982.^a

	Mod	Mode of Transportation		
Receiving State	Truck	Rail	Barge	Total
	th	ousands of bus	shels	
Alabama	5,222	38,802	26,522	70,546
Arkansas	26,752	55,578	3,392	85,722
Georgia	7,266	81,295	0	88,561
Illinois	42,719	15,504	317	58,540
Kentucky	7,559	3,108	350	11,017
Louisiana	10,530	6,955	6,961	24,446
Mississippi	1,086	45,999	4,613	51,698
Ohio	70,813	2,357	0	73,170
Tennessee	9,597	32,068	27,929	69,594
Total nine states	181,544	281,666	70,084	533,294
Percent of total volume	34.04	52.82	13.14	100.00

^a Receipts at ports are not included.

Table 6. Interstate Corn Receipts in Selected States by Mode of Transport, 1983.^a

	Mod	Mode of Transportation					
Receiving State	Truck	Rail	Barge	Total			
thousands of bushels							
Alabama	3,667	25,130	37,455	66,252			
Arkansas	20,832	69,188	6,784	96,804			
Georgia	2,192	60,927	110	63,229			
Illinois	36,655	43,538	386	80,579			
Kentucky	12,185	5,761	171	18,117			
Louisiana	120	8,348	9,307	17,775			
Mississippi	737	32,793	3,778	37,308			
Ohio	68,227	5,459	0	73,686			
Tennessee	7,560	36,731	37,824	82,115			
Total nine states	152,175	287,875	95,815	535,865			
Percent of total volume	28.40	53.72	17.88	100.00			

^a Receipts at ports are not included.

Table 7. Interstate Corn Shipments in Selected States, 1982 and 1983.^a

	Total			
Shipping State	1982	1983	Percent change	
	thousand	ds of bushels		
Alabama	11,357	6,623	-41.68	
Arkansas	796	3,328	318.09	
Georgia	8,108	9,719	19.87	
Illinois	834,148	723,066	-13.32	
Kentucky	82,438	47,168	-42.78	
Louisiana	2,368	2,205	-6.88	
Mississippi	5,356	1,779	-66.78	
Ohio	293,583	253,062	-13.80	
Tennessee	17,779	6,273	-64.72	
Total nine states	1,255,933	1,053,223	-16.14	

a Includes shipments to port areas.

total shipments from the nine states decreased from 1.26 billion bushels in 1982 to 1.05 billion bushels in 1983 (a 16 percent decline). The explanation for the decrease in shipments between 1982 and 1983 while receipts stayed nearly constant was a dramatic drop in shipments to ports from normally surplus production states such as Illinois.

The most significant drop was in truck shipments by the nine-state region in 1983 — from 148.1 million bushels in 1982 to only 76.5 million bushels in 1983 (Tables 8 and 9). The two largest contributors to this drop were Illinois and Ohio. As a result, truck's share of shipments dropped from 12 percent in 1982 to 7 percent in 1983, while rail's share of shipments remained nearly constant, and barge's share increased by 5 percent.

Within the nine-state area, Illinois and Ohio experienced the most dramatic loss of volume to port areas. Together, their volume to ports was reduced from 886 million bushels to 755 million bushels between 1982 and 1983 (Table 10). Illinois, which in 1982 provided 37 percent of the total corn volume received at ports, dropped its share to 32 percent in 1983. Ohio's share dropped from 13

percent to 10 percent. The shares for the nine states were somewhat inflated for both years because the data from non-participating states were limited to rail and barge (thus excluding truck shipments to port areas). However, truck shipments to ports in most of these non-participating states were relatively minor for corn.

As a result of the concentrated corn production within the Cornbelt and Lake states, few of the Southern states had a significant role in originating export volume. Of the Southern states included, only Kentucky accounted for more than 1 percent of exports in 1982. This percentage fell to only .9 percent in 1983. Arkansas and Mississippi had dramatic percentage increases in volume shipped to ports. However, both started from a very small base — less than 300,000 bushels shipped by each state to port areas in 1982.

Total receipts at port areas in 1983 were 2 percent above the 1982 figure (Table 10). The leading states in 1982 were Illinois, Iowa, Ohio, Indiana, Minnesota, and Missouri (in that order). In 1983, the leading states in order of total volume shipped to ports were Illinois, Iowa, Minnesota, Ohio, Indiana, and

Table 8. Interstate Corn Shipments in Selected States by Mode of Transport, 1982.^a

	Mod	Mode of Transportation		
Shipping State	Truck	Rail	Barge	Total
	th	ousands of bu	shels	
Alabama	6,956	1,614	2,787	11,357
Arkansas	635	0	161	796
Georgia	1,785	6,115	208	8,108
Illinois	33,687	241,751	558,710	834,148
Kentucky	14,314	23,778	44,346	82,438
Louisiana	137	0	2,231	2,368
Mississippi	5,011	0	345	5,356
Ohio	79,047	166,876	47,660	293,583
Tennessee	6,490	9,432	1,857	17,779
Total nine states	148,062	449,566	658,305	1,255,933
Percent of total volume	11.79	35.80	52.42	100.00

^a Includes shipments to port areas.

Table 9. Interstate Corn Shipments in Selected States by Mode of Transport, 1983.^a

	Mod	Mode of Transportation		
Shipping State	Truck	Rail	Barge	Total
	th	ousands of bu	shels	
Alabama	1,476	3,324	1,823	6,623
Arkansas	2,468	0	860	3,328
Georgia	1,927	7,696	96	9,719
Illinois	26,056	162,913	534,097	723,066
Kentucky	3,800	19,110	24,258	47,168
Louisiana	223	0	1,982	2,205
Mississippi	648	709	422	1,779
Ohio	37,421	171,063	44,578	253,062
Tennessee	2,504	2,777	992	6,273
Total nine states	76,523	367,592	609,108	1,053,223
Percent of total volume	7.27	34.90	57.83	100.00

^a Includes shipments to port areas.

Table 10. State Shares of Port Receipts of Corn, 1982 and 1983.

Colonted	19	982	19	983	
Selected Origin States	Total Volume	Percent Share	Total Volume	Percent Share	Percen Change
	(,000 bu.)		(,000 bu.)		
Alabama	4,150	0.24	2,470	0.14	-40.48
Arkansas	161	0.01	600	0.03	272.67
Georgia	150	0.01	48	0.00	-68.00
Illinois	655,128	37.12	578,732	32.18	-11.66
Kentucky	41,500	2.35	15,730	0.87	-62.10
Louisiana	1,827	0.10	1,547	0.09	-15.33
Mississippi	291	0.02	722	0.04	148.11
Ohio	230,906	13.08	176,200	9.80	-23.69
Tennessee	1,100	0.06	700	0.04	-36.36
Other					
Origin States ^a					
Colorado	0	0.00	2,000	0.11	Infinite
Indiana	197,606	11.20	138,343	7.69	-29.99
Iowa	282,282	16.00	340,311	18.93	20.56
Kansas	13,040	0.74	10,592	0.59	-18.77
Maryland	0	0.00	700	0.04	Infinite
Michigan	45,000	2.55	24,401	1.36	-45.78
Minnesota	141,165	8.00	224,082	12.46	58.74
Missouri	52,685	2.99	41,962	2.33	-20.35
Nebraska	32,000	1.81	132,000	7.34	312.50
North Carolina	7,887	0.45	322	0.02	-95.92
North Dakota	4,286	0.24	10,601	0.59	147.34
Oregon	269	0.02	1,498	0.08	456.88
Pennsylvania	0	0.00	1,500	0.08	Infinite
South Dakota	8,000	0.45	20,000	1.11	150.00
Texas	6,030	0.34	18,163	1.01	201.21
Virginia	2,268	0.13	251	0.01	-88.93
Washington	8,062	0.46	7,679	0.43	-4.75
Wisconsin	29,000	1.64	47,000	2.61	62.07
Total	1,764,793	100.00	1,798,154	100.00	1.89

^a Includes secondary data only; no truck data were provided by these states.

Nebraska. The change in ranking was due in part to relative decreases in production between those two years in the different states and to the shift from local destinations to port destinations for many states.

There was a major decrease in Illinois shipments to the Louisiana Gulf and the Atlantic ports as a result of the shortfall in production (Table 11). Indiana also reduced its shipments to port areas by 30 percent, primarily in barge shipments. Kentucky's loss of export share came as a result of its shortfall in production. Ohio reduced its shipments to Toledo due to dramatically reduced exports from the Toledo area in 1983. Ohio also decreased shipments to the South Atlantic and all other port areas. None of the other states in the nine-state study region were major players in shipments to ports for either year. Thus, the 1983 production shortfall had little impact on their port shipments.

The volume of corn inspected for export from the Louisiana Gulf region was approximately the same in 1983 as in 1982 (Table 12). However, there was an increase in export volume from the Pacific ports and in direct shipments from the interior of the United States. The dramatic increase in export volume from Pacific ports, linked to increased corn exports to Asia, raised the Pacific's share of total exports from 4 percent to 12 percent. Direct shipments from the interior of the United States jumped from .2 million to 50.6 million bushels between 1982 and 1983.

Corn Shipments and Receipts in the Nine-State Region

Alabama

The detailed data in the Appendix tables reveal interesting patterns of change in mode and destinations between states. Alabama experienced a 28 percent decrease in production (Table 2) and receipts fell by 6 percent (Table 3), forcing shipments to fall by 42 percent. The Alabama corn inventory reduction helped offset the lower production, but total supply was still 23 percent lower in 1983.

The loss of receipts from Illinois, Indiana, and Kentucky was partially offset by higher volumes of barge shipments from Iowa, Ohio, and Minnesota. Receipts from these states increased barge's share from 38 percent in 1982 to 56 percent in 1983. Shipments from Alabama decreased from 11.4 million bushels in 1982 to 6.6 million bushels in 1983. Rail shipments increased (primarily to Florida) and rail became the predominant mode of transportation. Shipments to ports declined from 4.1 to 1.5 million bushels. The short supply limited Alabama's shipments to nearby domestic feeders. Truck shipments to Louisiana — the largest destination in 1982 — dropped to zero in 1983 as a result of Louisiana's increased production.

Arkansas

Arkansas' production declined by only 2 percent, but receipts increased by 12.9 percent (over 14 million bushels). Most of the increase came by rail. Increased receipts from Indiana, Minnesota, and Nebraska helped enhance rail's share at the expense of barge. Receipts from Illinois, Iowa, and Missouri declined in response to the shortfall in production. Arkansas' shipments also increased (by 2.5 million bushels) during 1983, particularly to Oklahoma.

Table 11.

Corn Receipts at Port Regions by State of Origin, 1982 and 1983.^a

Quantity						
Origin state	Port region	1982	1983	Percent change		
		thousand	s of bushels			
Alabama	Eastern Gulf	3,500	1,470	-58.00		
	Louisiana Gulf	650	1,000	53.85		
Arkansas	Louisiana Gulf	161	600	272.67		
Colorado	Pacific Northwest	0	2,000	Infinite		
Georgia	Louisiana Gulf	0	48	Infinite		
	South Atlantic	150	0	-100.00		
Illinois	Chicago	1,128	2,000	77.30		
	Eastern Gulf	8,000	5,899	-26.26		
	Louisiana Gulf	609,000	560,000	-8.05		
	North Atlantic	9,000	1,900	-78.89		
	South Atlantic	28,000	4,680	-83.29		
	Texas Gulf	0	4,253	Infinite		
Indiana	Chicago	2,000	4,000	100.00		
	Eastern Gulf	3,000	1,000	-66.67		
	Louisiana Gulf	68,953	46,000	-33.29		
	North Atlantic	20,000	16,703	-16.49		
	South Atlantic	100,000	67,538	-32.46		
	Toledo	3,653	3,102	-15.08		
Iowa	California Ports	4,000	1,501	-62.48		
	Chicago	15,000	65,500	336.67		
	Eastern Gulf	0	138	Infinite		
	Louisiana Gulf	229,000	255,000	11.35		
	Pacific Northwest	8,282	4,659	-43.75		
	South Atlantic	0	500	Infinite		
	Texas Gulf	26,000	13,013	-49.95		
Kansas	California Ports	6,000	2,000	-66.67		
	Louisiana Gulf	361	0	-100.00		
	Pacific Northwest	679	0	-100.00		
	Texas Gulf	6,000	8,592	43.20		
Kentucky	Eastern Gulf	1,500	730	-51.33		
	Louisiana Gulf	33,000	15,000	-54.55		
	South Atlantic	7,000	0	-100.00		
Louisiana	Louisiana Gulf	1,827	1,547	-15.33		
Maryland	South Atlantic	0	700	Infinite		
Michigan	Eastern Gulf	0	500	Infinite		
Ü	Louisiana Gulf	0	500	Infinite		
	North Atlantic	8,000	7,000	-12.50		
	South Atlantic	32,000	12,401	-61.25		
	Toledo	5,000	4,000	-20.00		
				(Continued)		

Table 11. — Continued

Corn Receipts at Port Regions by State of Origin, 1982 and 1983.^a

		Q۱	antity					
Origin state	Port region	1982	1983	Percent change				
thousands of bushels								
Minnesota	California Ports	4,000	7,000	75.00				
	Chicago	13,000	1,500	-88.46				
	Eastern Gulf	500	0	-100.00				
	Louisiana Gulf	102,778	173,800	69.10				
	Pacific Northwest	20,887	41,782	100.04				
Mississippi	Eastern Gulf	0	300	Infinite				
	Louisiana Gulf	291	422	45.02				
Missouri	Louisiana Gulf	49,685	36,500	-26.54				
	Texas Gulf	3,000	5,462	82.07				
Nebraska	California Ports	10,000	20,000	100.00				
	Louisiana Gulf	0	7,000	Infinite				
	Pacific Northwest	12,000	85,000	608.33				
	Texas Gulf	10,000	20,000	100.00				
North Carolina	South Atlantic	7,887	322	-95.92				
North Dakota	Pacific Northwest	4,286	10,601	147.34				
Ohio	Louisiana Gulf	45,000	40,000	-11.11				
	North Atlantic	40,000	38,000	-5.00				
	South Atlantic	70,000	64,000	-8.57				
	Toledo	75,906	45,633	-39.88				
Oregon	Pacific Northwest	269	1,498	456.88				
Pennsylvania	North Atlantic	0	1,500	Infinite				
South Dakota	Pacific Northwest	8,000	20,000	150.00				
Tennessee	Louisiana Gulf	1,100	700	-36.36				
Texas	California Ports	1,000	5,000	400.00				
	Louisiana Gulf	30	163	443.33				
	Texas Gulf	5,000	13,000	160.00				
Virginia	South Atlantic	2,268	251	-88.93				
Washington	Pacific Northwest	8,062	7,679	-4.75				
Wisconsin	Louisiana Gulf	29,000	47,000	62.07				
Total		1,764,793	1,809,587	2.54				

^a Survey data supplemented by secondary data from non-participating states.

Table 12.

Corn Inspected for Export by Region and Port Area, 1982 and 1983.

Port region	1982		1983		Demonst
	Total volume	Percent share	Total volume	Percent share	Percent change
	thousands of bushels				
Great Lakes Region					
Chicago Area	31,611	1.64	19,737	1.06	-37.5
Duluth Area	2,899	0.15	22,113	1.19	662.7
Toledo Area	84,512	4.39	40,491	2.17	-52.0
Saginaw Area	2,093	0.11	0	0.00	-100.0
Subtotal	121,115	6.29	82,341	4.42	-32.0
Atlantic Region					
North	85,848	4.46	69,092	3.71	-19.5
South	323,892	16.81	174,700	9.38	-46.0
Subtotal	409,740	21.27	243,792	13.09	-40.5
Gulf Region					
Louisiana Gulf	1,244,975	64.62	1,216,276	65.32	-2.3
Eastern Gulf	18,376	0.95	3,088	0.17	-83.2
Texas Gulf	50,939	2.64	44,040	2.37	-13.5
Subtotal	1,314,290	68.22	1,263,404	67.85	-3.8
Pacific Region					
Columbia River	5,409	0.28	37,636	2.02	595.8
Puget Sound	51,378	2.67	138,731	7.45	170.0
California Ports	24,488	1.27	45,440	2.44	85.5
Subtotal	81,275	4.22	221,807	11.91	172.9
Interior Regiona	200	0.01	50,587	2.72	25,193.5
Subtotal	200	0.01	50,587	2.72	25,193.5
Total	1,926,620	100.00	1,861,931	100.00	-3.30

 $^{^{\}rm a}\,$ Includes direct shipments to Mexico and Canada.

Source: *Grain and Feed Market News*, Agricultural Marketing Service, U.S.D.A., Washington, D.C., various issues.

Georgia

Georgia inventory changes more than offset changes in production between 1982 and 1983. Georgia's production fell by 20 percent, but if inventory changes are considered, Georgia's corn supply actually increased by 12 percent. Interstate shipments by Georgia increased 20 percent in 1983, reflecting the larger supply. The larger supply also explains Georgia's 50 percent increase in intrastate shipments. Georgia's interstate receipts fell by 29 percent. The larger supply in Georgia and lower production in the surrounding states reduced truck shipments into Georgia.

Illinois

Corn production in Illinois fell by more than 50 percent in 1983 — from 1.5 billion bushels to .6 billion bushels (Table 2). The Illinois surplus fell by more than 157 million bushels (in spite of inventory depletions to supplement production). Receipts increased by 22 million bushels and shipments fell by 111 million bushels. Truck transport accounted for 73 percent of receipts in 1982, but rail was the most common receipt method in 1983 with a 54 percent share. Iowa, Michigan, and Minnesota accounted for most of Illinois' increased receipts — all three increased their rail shipments to Illinois substantially in 1983. Iowa usually ships substantial quantities of corn to Illinois by truck, but the large rail shipments in 1983 could have been in response to the PIK program, which encouraged the movement of grain out of inventories.

The relative importance of rail, truck, and barge in Illinois changed only slightly between 1982 and 1983. Given Illinois' access to the Mississippi River, the most economical alternative was to ship to the Gulf ports. There was an absolute decline in volume for all modes, but rail was most affected. Barge volume to port areas was maintained, but rail shipments to Atlantic and Louisiana Gulf

ports fell markedly. There was a shift from truck to rail for intrastate shipments — rail's share went from 9 percent in 1982 to 21 percent in 1983 while truck's share had a concomitant decline.

Kentucky

Even though Kentucky experienced a 70 percent decrease in production between 1982 and 1983, total corn supply from the state fell only 23 percent. Interstate shipments fell from 82.4 million bushels in 1982 to 47.2 million bushels in 1983. Much of the reduction in 1983 shipments was in barge shipments to the Louisiana Gulf (reduced by 18 million bushels between the two years). Most other destinations had only small reductions in volume. Rail gained market share in 1983 as compared to truck and barge. Shorter truck hauls, particularly to Tennessee, were cut more sharply than rail volumes. The modal shares in transportation changed little between 1982 and 1983 for Kentucky interstate receipts and shipments. Kentucky drew more corn from Indiana in 1982 to cover its feeding and processing needs, with most of it transported by truck. Intrastate shipments in Kentucky fell by more than the drop in supply (49 percent), but less than the fall in production.

Louisiana

Louisiana's 58 percent increase in production was offset by increased ending inventory in storage, such that corn supply in the state fell 75 percent. Louisiana's total interstate shipments was 7 percent lower in 1983, a drop that is consistent with its lower volume of supplies. Intrastate shipments in Louisiana still increased by 56 percent, as a result of the need to handle the larger production. Interstate receipts fell by 27 percent, due primarily to the lower volume of supplies available from Illinois. The low volume of supplies in Alabama (down 25 percent) and in Mississippi (down 28 percent) in 1983 eliminated Louisiana's receipts from those states.

Receipts by barge and rail increased in 1983 primarily as a result of large shipments from lowa by barge and Nebraska by rail.

Mississippi

Mississippi received less corn from out-of-state in 1983 than in 1982, despite the 37 percent drop in production and 29 percent decrease in supply. Interstate shipments fell by 3.6 million bushels to compensate for reduced imports and lower supplies. Less corn was received from Illinois, Kentucky, and Tennessee — all states severely affected by low yields. Rail receipts accounted for over 88 percent of total interstate receipts for Mississippi in both years. Intrastate shipments, moved mostly by rail in 1982, were moved exclusively by truck in 1983, but volumes were small in both years.

Ohio

There was a significant release of corn stocks in Ohio, even though production fell from 456 million bushels in 1982 to 224 million bushels in 1983. Consequently, the Ohio surplus in 1983 was nearly 41 million bushels greater than in 1982. Ohio's total receipts did not change, while total shipments declined by over 29 million bushels. Rail made up 57 percent of Ohio's shipments during 1982, increasing to 69 percent in 1983. Most of the reduced shipments from Ohio were accounted for by lower truck shipments to the Toledo port. Ohio's shift toward rail was also apparent in the intrastate shipments. Nearly all of Ohio's intrastate shipments were by truck in 1982, but in 1983, rail shipments accounted for 8 percent of intrastate movements. The 49 percent reduction in 1983 intrastate shipments reflects the decreased production. Most of the release in inventory was moved by rail.

Tennessee

Tennessee not only experienced a 59 percent decline in production, but also accumulated corn inventories in 1983. Increased

corn receipts from Indiana, Iowa, Michigan, Ohio, and Wisconsin more than offset reduced receipts from Illinois and Kentucky. In total, interstate receipts jumped from 69.6 million bushels in 1982 to 82.1 million bushels in 1983. Barge shipments accounted for a slightly higher percentage of interstate receipts in 1983.

Tennessee reduced its interstate shipments between the two years by 11.5 million bushels. Rail's share of shipments fell from 53 percent in 1982 to 44 percent in 1983. There wasn't enough corn available for Tennessee to ship corn by rail to states like Alabama and Mississippi. Intrastate shipments only fell by 27 percent, despite the large reductions in production and supply. Essentially, all intrastate shipments were by truck in both years.

Supplemental Analysis of Non-Participating States

Although only nine states were included in the survey of grain handling firms, other data sources provided information on volumes shipped by rail and barge. For the nine states in the survey, these data from secondary sources were adjusted and allocated to destinations using the information provided in survey response. No similar basis for adjustment was available for other states. However, these data show useful relationships and changes over time and are included in Appendix B (1982 data) and Appendix C (1983 data) for all states. These tables included all adjustments presented in Appendix A as well as unadjusted data for non-participating states.

Two cornbelt states — Indiana and Iowa — were not in the survey, but were important suppliers to corn-deficit states in the Southeast. Indiana's corn production in 1983 was 340 million bushels versus 790 million bushels in 1982 (Table 2). However, corn inventories in Indiana fell by over 500

million bushels between 1982 and 1983, increasing corn supply by 10 percent. Rail and barge shipments from Indiana in 1983 were 18 percent below their 1982 level, but all of that decrease was accounted for by smaller shipments from Indiana to various port areas. Interstate truck shipments, which were not identified in this study, must have been substantially larger in 1983 than in 1982. Both Indiana and Iowa had large increases in intrastate shipments by rail and barge (122 percent and 99 percent respectively), which could indicate movements related to the PIK program.

Despite lowa's short crop in 1982 (743 million bushels) as compared to 1983 (1.58 billion bushels), corn supply was 18 percent higher than in 1982 (Table 2). Almost 800 million bushels of corn inventory in lowa entered the market in 1983. Corn shipments from Iowa in 1983 were 151 million bushels higher than in 1982, which may be underestimated because truck shipments were not included (Appendix Tables B-9 and C-9). Increased shipments to port areas took 60 million bushels of the 151 million, but the rest went to domestic destinations. Every southeastern state, except Arkansas, had larger corn receipts from Iowa in 1983 than in 1982. In total, the nine states in this study increased their receipts of Iowa corn by 44.5 million bushels in 1983 as compared to 1982 (a 62 percent increase). The PIK program was undoubtedly a major influence in Iowa's pattern of shipments. lowa farmers withdrew 6.3 million acres from corn production (42.6 percent of their base acreage) with a participation rate of 78.9 percent compared to a national average of 71.4 percent.

Summary and Conclusions

The comparison between 1982 and 1983 gives an interesting picture of how the grain marketing system reacts to changes in grain production and policy. Production in the nine-state region covered in this study fell 56 percent between 1982 and 1983. Some of this decrease was due to the PIK program, while some was due to the severe drought. However, large beginning inventories were moved into the market and helped maintain the supplies, resulting in a decrease of only 7 percent in available supply in the region. Interstate receipts by the nine-state region were unchanged, but interstate shipments fell by 16 percent.

There is a distinction between the changes that occurred in production and in supply between 1982 and 1983. Released corn from carryover stocks cushioned the effects of the dramatically reduced corn crop in 1983. Generally, those states that had lower supplies in 1983 than in 1982 reported increased interstate receipts, decreased interstate shipments, and decreased intrastate shipments (or vice versa if there was a higher supply). However, Louisiana and Alabama did not fit this pattern for interstate receipts. Their supply fell in 1983, despite increased receipts, though this might be partially explained for Louisiana by transshipment to Louisiana Gulf ports and increased use in production of alcohol. The result for Alabama might reflect the large reduction in Alabama interstate shipments, which allowed Alabama's interstate receipts to fall slightly despite a smaller supply. Ohio did not fit this pattern for interstate shipments (its supply increased, but its interstate shipments fell).

Intrastate shipments in three states (Louisiana, Mississippi, and Ohio) were not positively related to corn supply. Again, transshipment of exports could explain this occurrence for Louisiana. Mississippi handled its reduced supply by lowering interstate

receipts and shipments while increasing its intrastate shipments, using its corn supply for feed and processing instead of importing and exporting corn. Ohio's reduction in intrastate shipments was probably due to lower production in the state for 1983. Corn inventories may have been used in the local area for feed and processing consumption, so that intrastate shipments were not required.

It is impossible to determine how much of the change in corn flows reported in this study was due exclusively to the PIK program. It was alleged that substantial volumes of corn were moved between some regions simply because of price differences for certificates in the government program. Seven of the nine states in this study had percentage changes in intrastate shipments which were greater than the percentage changes in supply (the exceptions were Ohio and Tennessee). Indiana and lowa, two states which are important corn-producing states and suppliers to the Southeast, also had substantially larger increases in intrastate shipments than their supply increases. Intrastate movements in Georgia were also much larger in 1983 than corn production or supply would seem to warrant. Many of these intrastate movements could have been caused by PIK certificate redemption in areas of the state where corn inventories were not available, forcing additional shipments of corn.

Changes in interstate movements in each of the nine states seemed to reflect the percentage changes in supply between the years. One exception to this rule was Arkansas, where interstate shipments increased three fold, while corn supply fell slightly. Otherwise, percentage changes in interstate shipments were generally smaller than the percentage changes in corn supply.

There was a tendency for interstate shipments of corn to move further in 1983 than in 1982. The substantial increase in corn shipments from lowa to the Southeast to substitute for shorter truck hauls between South-

eastern states could be due to PIK certificate redemption, to reduced corn production, or availability of corn inventories. It is impossible to determine the extent to which changes in the corn flows were the result of changes in supplies or the design of the government program.

Despite the convolution of the causes of the movements, this study provides an interesting glimpse of what might happen to corn shipment patterns in the United States when there is a substantial reduction in crop size with a concomitant release of storage stocks. Such an occurrence can have a substantial impact on the origins and destinations of grain. It seems that the widespread drought and production control programs of 1983 increased the transportation needs of the system per bushel of grain produced. Shipments and receipts fell, but not nearly as much as production and supply.

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Appendix Tables

Receipts and Shipments of Corn by State, 1982 and 1983

Appendix A

Receipts and Shipments of Corn by State, 1982-83

Table A-1. Alabama, 1982

Corn Receipts^a from Various Origins

Origin	Truck	Rail	Barge	Total			
	thousands of bushels						
Georgia	1,635	241	208	2,084			
Illinois	1,501	12,205	7,188	20,894			
Indiana	0	19,378	1,900	21,278			
Iowa	0	0	1,413	1,413			
Kentucky	1,317	5,102	5,193	11,612			
Minnesota	0	0	7,560	7,560			
Missouri	0	0	1,708	1,708			
Ohio	289	224	945	1,458			
Tennessee	480	1,652	238	2,370			
Wisconsin	0	0	169	169			
Total interstate	5,222	38,802	26,522	70,546			

	Mod	de of transp		
Destination	Truck	Rail	Barge	Total
	the	ousands of l	bushels	
Florida	0	271	0	271
Georgia	420	257	0	677
Louisiana	5,000	0	86	5,086
Mississippi	26	971	0	997
North Carolina	0	71	0	71
Tennessee	10	0	51	61
Virginia	0	44	0	44
Eastern Gulf	1,500	0	2,000	3,500
Louisiana Gulf	0	0	650	650
Total interstate	6,956	1,614	2,787	11,357
Intrastate	35,340	126	875	36,341
Total	42,296	1,740	3,662	47,698

a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

Table A-2. Arkansas, 1982

	Mode	tation				
Origin	Truck	Rail	Barge	Total		
thousands of bushels						
Illinois .	7,164	18,673	2,566	28,403		
Indiana	0	0	167	167		
Iowa	3,843	21,125	159	25,127		
Kansas	3,138	1,019	0	4,157		
Louisiana	137	0	107	244		
Minnesota	0	2,233	115	2,348		
Missouri	8,226	3,017	278	11,521		
Nebraska	4,150	6,021	0	10,171		
Oklahoma	39	0	0	39		
South Dakota	0	3,490	0	3,490		
Tennessee	16	0	0	16		
Texas	39	0	0	39		
Total interstate	26,752	55,578	3,392	85,722		

Corn Shipments^b to Various Destinations

	Mode	of transpor		
Destination	Truck	Rail	Barge	Total
	thous	ands of bu	shels	
Louisiana	530	0	0	530
Tennessee	105	0	0	105
Louisiana Gulf	0	0	161	161
Total interstate	635	0	161	796
Intrastate	2,456	0	0	2,456
Total	3,091	0	161	3,252

^a Receipts at ports are not included.

Table A-3. Georgia, 1982

Corn Receipts^a from Various Origins

Mode of transportation						
Origin	Truck	Rail	Barge	Total		
thousands of bushels						
Alabama	420	257	0	677		
Florida	3,000	476	0	3,476		
Illinois	0	20,049	0	20,049		
Indiana	0	44,396	0	44,396		
Kentucky	2,308	1,907	0	4,215		
Michigan	0	256	0	256		
North Carolina	0	4,255	0	4,255		
Ohio	0	6,324	0	6,324		
South Carolina	0	3,000	0	3,000		
Tennessee	1,538	239	0	1,777		
Texas	0	136	0	136		
Total interstate	7,266	81,295	0	88,561		

Mode of transportation						
Destination	Truck	Rail	Barge	Total		
	thousands of bushels					
Alabama	1,635	241	208	2,084		
Florida	0	5,751	0	5,751		
South Carolina	0	123	0	123		
South Atlantic	150	0	0	150		
Total interstate	1,785	6,115	208	8,108		
Intrastate	4,383	2,535	0	6,918		
Total	6,168	8,650	208	15,026		

a Receipts at ports are not included.

b Shipments to ports are treated as separate destinations.

^b Shipments to ports are treated as separate destinations.

Table A-4. Illinois, 1982

Origin	Truck	Rail	Barge	Total			
	thousands of bushels						
Indiana	2,992	3,331	0	6,323			
Iowa	22,708	7,955	157	30,820			
Louisiana	0	0	50	50			
Minnesota	0	3,483	0	3,483			
Missouri	4,392	0	52	4,444			
Ohio	1,200	0	58	1,258			
Wisconsin	11,427	735	0	12,162			
Total intersta	ite 42,719	15,504	317	58,540			

	Mode of transportation			
Destination	Truck	Rail	Barge	Total
	tho	usands of b	ushels	
Alabama	1,501	12,205	7,188	20,894
Arkansas	7,164	18,673	2,566	28,403
Delaware	0	696	0	696
Florida	0	3,044	0	3,044
Georgia	0	20,049	0	20,049
Indiana	6,815	4,682	53	11,550
Iowa	12,443	2,305	52	14,800
Kentucky	1,001	10	0	1,011
Louisiana	0	5,015	113	5,128
Maryland	0	5,709	0	5,709
Michigan	0	325	0	325
Mississippi	310	29,146	2,062	31,518
Missouri	4,129	823	827	5,779
New York	0	679	0	679
North Carolina	0	543	0	543
Ohio	0	704	0	704
Oklahoma	0	1,075	210	1,285
Pennsylvania	0	1,824	0	1,824
South Carolina	0	120	0	120
Tennessee	196	9,412	6,639	16,247
Texas	0	4,011	0	4,011
Virginia	0	4,701	0	4,701
Chicago/Dulutl	h 128	1,000	0	1,128
North Atlantic	0	9,000	0	9,000
South Atlantic	0	28,000	0	28,000
Eastern Gulf	0	6,000	2,000	8,000
Louisiana Gulf	0	72,000	537,000	609,000
Total interstate	33,687	241,751	558,710	834,148
Intrastate 3	326,227	31,544	436	358,207
Total 3	359,914	273,295	559,146	1,192,355

^a Receipts at ports are not included.

 $^{^{\}mbox{\scriptsize b}}$ Shipments to ports are treated as separate destinations.

Table A-5. Kentucky, 1982

	Mode	Mode of transportation				
Origin	Truck	Rail	Barge	Total		
thousands of bushels						
Illinois	1,001	10	0	1,011		
Indiana	0	2,958	0	2,958		
Ohio	2,102	140	49	2,291		
Tennessee	4,456	0	53	4,509		
Wisconsin	0	0	248	248		
Total interstate	7,559	3,108	350	11,017		

Corn Shipments^b to Various Destinations

	Mod	e of transpo	ortation	
Destination	Truck	Rail	Barge	Total
	tho	usands of b	ushels	
Alabama	1,317	5,102	5,193	11,612
Florida	0	3,058	0	3,058
Georgia	2,308	1,907	0	4,215
Louisiana	0	0	879	879
Mississippi	750	3,386	737	4,873
North Carolina	0	966	0	966
Ohio	756	0	0	756
South Carolina	0	499	0	499
Tennessee	9,183	860	4,037	14,080
South Atlantic	0	7,000	0	7,000
Eastern Gulf	0	1,000	500	1,500
Louisiana Gulf	0	0	33,000	33,000
Total interstate	14,314	23,778	44,346	82,438
Intrastate	7,709	1,054	0	8,763
Total	22,023	24,832	44,346	91,201

a Receipts at ports are not included.

Table A-6. Louisiana, 1982

Corn Receipts^a from Various Origins

Mode of transportation						
Origin	Truck	Rail	Barge	Total		
	thousands of bushels					
Alabama	5,000	0	86	5,086		
Arkansas	530	0	0	530		
Illinois	0	5,015	113	5,128		
Iowa	0	1,103	2,699	3,802		
Kentucky	0	0	879	879		
Minnesota	0	52	0	52		
Mississippi	5,000	0	0	5,000		
Missouri	0	340	1,500	1,840		
Nebraska	0	445	47	492		
Ohio	0	0	1,171	1,171		
Tennessee	0	0	466	466		
Total interstat	e 10,530	6,955	6,961	24,446		

	Mode	tation				
Destination	Truck	Rail	Barge	Total		
thousands of bushels						
Arkansas	137	0	107	244		
Illinois	0	0	50	50		
Indiana	0	0	100	100		
Iowa	0	0	50	50		
Mississippi	0	0	97	97		
Louisiana Gulf	0	0	1,827	1,827		
Total interstate	137	0	2,231	2,368		
Intrastate	870	0	0	870		
Total	1,007	0	2,231	3,238		

a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

^b Shipments to ports are treated as separate destinations.

Table A-7. Mississippi, 1982

Mode of transportation				
Origin	Truck	Rail	Barge	Total
	thou	isands of bu	shels	
Alabama	26	971	0	997
Illinois	310	29,146	2,062	31,518
Indiana	0	2,599	45	2,644
Iowa	0	816	688	1,504
Kentucky	750	3,386	737	4,873
Louisiana	0	0	97	97
Minnesota	0	0	509	509
Missouri	0	1,082	420	1,502
Ohio	0	0	55	55
Tennessee	0	7,299	0	7,299
Texas	0	700	0	700
Total interstate	1,086	45,999	4,613	51,698

Corn Shipments^b to Various Destinations

Mode of transportation						
Destination	Truck	Rail	Barge	Total		
thousands of bushels						
Louisiana	5,000	0	0	5,000		
Missouri	0	0	54	54		
Tennessee	11	0	0	11		
Louisiana Gulf	0	0	291	291		
Total interstate	5,011	0	345	5,356		
Intrastate	140	250	0	390		
Total	5,151	250	345	5,746		

a Receipts at ports are not included.

Table A-8. Ohio, 1982

Corn Receipts^a from Various Origins

	Mode of transportation			
Origin	Truck	Rail	Barge	Total
	tho	usands of b	ushels	
Illinois	0	704	0	704
Indiana	34,732	1,653	0	36,385
Kentucky	756	0	0	756
Michigan	34,976	0	0	34,976
New York	156	0	0	156
Pennsylvania	193	0	0	193
Total interstate	70,813	2,357	0	73,170

	Mode of transportation			
Destination	Truck	Rail	Barge	Total
Alabama	289	224	945	1,458
Florida	0	840	0	840
Georgia	0	6,324	0	6,324
Illinois	1,200	0	58	1,258
Indiana	0	0	63	63
Kentucky	2,102	140	49	2,291
Louisiana	0	0	1,171	1,171
Maryland	22	4,221	0	4,243
Mississippi	0	0	55	55
New York	239	1,054	0	1,293
North Carolina	120	23,986	0	24,106
Pennsylvania	2,931	4,840	0	7,771
South Carolina	0	2,960	0	2,960
Tennessee	92	3,034	319	3,445
Texas	52	0	0	52
Virginia	0	5,347	0	5,347
Toledo	72,000	3,906	0	75,906
North Atlantic	0	40,000	0	40,000
South Atlantic	0	70,000	0	70,000
Louisiana Gulf	0	0	45,000	45,000
Total interstate	79,047	166,876	47,660	293,583
Intrastate 1	71,440	28	59	171,527
Total 2	50,487	166,904	47,719	465,110

a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

^b Shipments to ports are treated as separate destinations.

Table A-9. Tennessee, 1982

	Mode	rtation				
Origin	Truck	Rail	Barge	Total		
thousands of bushels						
Alabama	10	0	51	61		
Arkansas	105	0	0	105		
Illinois	196	9,412	6,639	16,247		
Indiana	0	11,259	1,728	12,987		
Iowa	0	7,503	1,701	9,204		
Kentucky	9,183	860	4,037	14,080		
Minnesota	0	0	11,486	11,486		
Mississippi	11	0	0	11		
Missouri	0	0	1,914	1,914		
Ohio	92	3,034	319	3,445		
Wisconsin	0	0	54	54		
Total interstate	9,597	32,068	27,929	69,594		

Corn Shipments^b to Various Destinations

	Mode	of transpor	tation		
Destination	Truck	Rail	Barge	Total	
	thou	sands of bu	shels		
Alabama	480	1,652	238	2,370	
Arkansas	16	0	0	16	
Florida	0	242	0	242	
Georgia	1,538	239	0	1,777	
Kentucky	4,456	0	53	4,509	
Louisiana	0	0	466	466	
Mississippi	0	7,299	0	7,299	
Louisiana Gulf	0	0	1,100	1,100	
Total interstate	6,490	9,432	1,857	17,779	
Intrastate	15,148	366	0	15,514	
Total	21,638	9,798	1,857	33,293	

^a Receipts at ports are not included.

Table A-10. Alabama, 1983

Corn Receipts^a from Various Origins

Mode of transportation						
Origin	Truck	Rail	Barge	Total		
thousands of bushels						
Florida	1,090	129	0	1,219		
Georgia	0	619	0	619		
Illinois	1,092	6,384	5,875	13,351		
Indiana	0	12,881	1,287	14,168		
Iowa	0	1,253	6,826	8,079		
Kentucky	658	2,890	3,900	7,448		
Minnesota	0	2 81	13,054	13,335		
Mississippi	250	0	0	250		
Missouri	0	0	1,041	1,041		
North Carolina	0	74	0	74		
Ohio	0	242	2,819	3,061		
Tennessee	577	377	0	954		
Wisconsin	0	0	2,653	2,653		
Total interstate	3,667	25,130	37,455	66,252		

	Mode	of transpor	tation	
Destination	Truck	Rail	Barge	Total
	thou	sands of bu	shels	
Florida	0	2,099	0	2,099
Georgia	200	604	18	822
Kentucky	0	134	0	134
Louisiana	0	0	305	305
Mississippi	20	487	0	507
Tennessee	286	0	0	286
Eastern Gulf	970	0	500	1,470
Louisiana Gulf	0	0	1,000	1,000
Total interstate	1,476	3,324	1,823	6,623
Intrastate	33,575	237	75	33,887
Total	35,051	3,561	1,898	40,510

a Receipts at ports are not included.

b Shipments to ports are treated as separate destinations.

b Shipments to ports are treated as separate destinations.

Table A-11. Arkansas, 1983

Corn Receipts^a from Various Origins

	Mode	e of transpor	tation		
Origin	Truck	Rail	Barge	Total	
thousands of bushels					
Illinois	8,300	15,345	2,968	26,613	
Indiana	9	4,462	2,765	7,236	
Iowa	3,166	21,178	559	24,903	
Kansas	561	1,855	0	2,416	
Louisiana	142	0	56	198	
Minnesota	0	4,213	387	4,600	
Mississippi	78	707	0	785	
Missouri	5,141	3,821	49	9,011	
Nebraska	3,345	14,936	0	18,281	
Oklahoma	40	137	0	177	
South Dakota	0	2,534	0	2,534	
Tennessee	10	0	0	10	
Texas	40	0	0	40	
Total interstate	20,832	69,188	6,784	96,804	

Corn Shipments^b to Various Destinations

	Mode			
Destination	Truck	Rail	Barge	Total
Illinois	0	0	54	54
Louisiana	120	0	206	326
Oklahoma	2,044	0	0	2,044
Tennessee	304	0	0	304
Louisiana Gulf	0	0	600	600
Total interstate	2,468	0	860	3,328
Intrastate	2,596	0	0	2,596
Total	5,064	0	860	5,924

^a Receipts at ports are not included.

Table A-12. Georgia, 1983

Corn Receipts^a from Various Origins

	Mode of transportation			
Origin	Truck	Rail	Barge	Total
	tho	usands of bu	shels	
Alabama	200	604	18	822
Illinois	0	15,993	46	16,039
Indiana	0	29,059	0	29,059
Iowa	0	281	0	281
Kentucky	640	7,489	46	8,175
Minnesota	0	277	0	277
North Carolina	0	381	0	381
Ohio	0	6,465	0	6,465
South Carolina	1,277	123	0	1,400
Tennessee	75	255	0	330
Total interstate	2,192	60,927	110	63,229

Mode of transportation						
Destination	Truck	Rail	Barge	Total		
thousands of bushels						
Alabama	0	619	0	619		
Florida	1,741	6,959	0	8,700		
Louisiana	0	0	48	48		
North Carolina	0	118	0	118		
Tennessee	186	0	0	186		
Louisiana Gulf	0	0	48	48		
Total interstate	1,927	7,696	96	9,719		
Intrastate	5,079	5,199	0	10,278		
Total	7,006	12,895	96	19,997		

a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

^b Shipments to ports are treated as separate destinations.

Table A-13. Illinois, 1983

	tation			
Origin	Truck	Rail	Barge	Total
	thou	sands of bu	shels	
Arkansas	0	0	54	54
Indiana	2,050	5,017	0	7,067
Iowa	19,824	28,297	0	48,121
Louisiana	0	0	275	275
Michigan	13	2,325	0	2,338
Minnesota	0	5,203	57	5,260
Missouri	3,496	577	0	4,073
Ohio	1,240	0	0	1,240
Wisconsin	10,032	2,119	0	12,151
Total intersta	te 36,655	43,538	386	80,579

^a Receipts at ports are not included.

	Mod	e of transpo	ortation	
Destination	Truck	Rail	Barge	Total
	tho	usands of b	ushels	
Alabama	1,092	6,384	5,875	13,351
Arkansas	8,300	15,345	2,968	26,613
Florida	0	5,048	0	5,048
Georgia	0	15,993	46	16,039
Indiana	5,157	5,456	53	10,666
Iowa	5,644	404	0	6,048
Kentucky	679	1,198	51	1,928
Louisiana	0	3,548	196	3,744
Maryland	0	600	0	600
Minnesota	0	1,184	0	1,184
Mississippi	254	23,087	1,700	25,041
Missouri	4,382	1,136	105	5,623
North Carolina	0	260	0	260
Ohio	0	1,443	0	1,443
Oklahoma	0	0	223	223
Pennsylvania	0	547	0	547
Tennessee	538	3,668	9,760	13,966
Texas	0	12,000	0	12,000
Wisconsin	10	0	0	10
Chicago	0	2,000	0	2,000
North Atlantic	0	1,900	0	1,900
South Atlantic	0	4,680	0	4,680
Eastern Gulf	0	5,000	899	5,899
Louisiana Gulf	0	48,000	512,000	560,000
Texas Gulf	0	4,032	221	4,253
Total interstate	26,056	162,913	534,097	723,066
Intrastate 2	59,223	67,155	216	326,594
Total 2	85,279	230,068	534,313	1,049,660

 $^{^{\}rm a}$ Shipments to ports are treated as separate destinations.

Table A-14. Kentucky, 1983

Corn Receipts^a from Various Origins

	Mode					
Origin	Truck	Rail	Barge	Total		
thousands of bushels						
Alabama	0	134	0	134		
Illinois	679	1,198	51	1,928		
Indiana	8,272	2,695	0	10,967		
Iowa	0	0	120	120		
Ohio	1,662	23	0	1,685		
Tennessee	1,572	0	0	1,572		
Wisconsin	0	1,711	0	1,711		
Total interstat	te 12,185	5,761	171	18,117		

Corn Shipments^b to Various Destinations

	Mode	e of transpo	rtation				
Destination	Truck	Rail	Barge	Total			
	thousands of bushels						
Alabama	658	2,890	3,900	7,448			
Florida	388	3,750	0	4,138			
Georgia	640	7,489	46	8,175			
Indiana	0	393	54	447			
Iowa	0	0	48	48			
Louisiana	0	0	156	156			
Mississippi	202	2,144	67	2,413			
Missouri	0	0	50	50			
North Carolina	0	763	0	763			
Ohio	330	0	0	330			
South Carolina	0	237	0	237			
Tennessee	1,582	744	4,907	7,233			
Eastern Gulf	0	700	30	730			
Louisiana Gulf	0	0	15,000	15,000			
Total interstate	3,800	19,110	24,258	47,168			
Intrastate	3,578	900	0	4,478			
Total	7,378	20,010	24,258	51,646			

^a Receipts at ports are not included.

Table A-15. Louisiana, 1983

Corn Receipts^a from Various Origins

	Mode	of transpor	tation	
Origin	Truck	Rail	Barge	Total
	thou	sands of bu	shels	
Alabama	0	0	305	305
Arkansas	120	0	206	326
Georgia	0	0	48	48
Illinois	0	3,548	196	3,744
Indiana	0	0	512	512
Iowa	0	2,516	4,018	6,534
Kansas	0	0	104	104
Kentucky	0	0	156	156
Michigan	0	0	149	149
Minnesota	0	125	515	640
Missouri	0	240	730	970
Nebraska	0	1,791	282	2,073
Ohio	0	0	1,124	1,124
Pennsylvania	0	0	58	58
Tennessee	0	128	292	420
Wisconsin	0	0	612	612
Total interstate	120	8,348	9,307	17,775

	Mode of transportation					
Destination	Truck	Rail	Barge	Total		
thousands of bushels						
Arkansas	142	0	56	198		
Illinois	0	0	275	275		
Minnesota	0	0	104	104		
Mississippi	81	0	0	81		
Louisiana Gulf	0	0	1,547	1,547		
Total interstate	223	0	1,982	2,205		
Intrastate	1,379	0	0	1,379		
Total	1,602	0	1,982	3,584		

a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

^b Shipments to ports are treated as separate destinations.

Table A-16. Mississippi, 1983

Corn Receipts^a from Various Origins

	Mode						
Origin	Truck	Rail	Barge	Total			
thousands of bushels							
Alabama	20	487	0	507			
Illinois	254	23,087	1,700	25,041			
Indiana	0	1,989	149	2,138			
Iowa	10	2,606	858	3,474			
Kentucky	202	2,144	67	2,413			
Louisiana	81	0	0	81			
Michigan	0	174	0	174			
Minnesota	0	419	300	719			
Missouri	0	140	546	686			
Ohio	0	0	158	158			
Tennessee	170	1,606	0	1,776			
Texas	0	141	0	141			
Total interstate	737	32,793	3,778	37,308			

Corn Shipments^b to Various Destinations

	Mode			
Destination	Truck	Rail	Barge	Total
	thous	ands of bu	shels	
Alabama	250	0	0	250
Arkansas	78	707	0	785
Tennessee	20	2	0	22
Eastern Gulf	300	0	0	300
Louisiana Gulf	0	0	422	422
Total interstate	648	709	422	1,779
Intrastate	779	0	0	779
Total	1,427	709	422	2,558

^a Receipts at ports are not included.

Table A-17. Ohio, 1983

Corn Receipts^a from Various Origins

	Mode of transportation			
Origin	Truck	Rail	Barge	Total
	thou	sands of bu	shels	
California	0	120	0	120
Illinois	0	1,443	0	1,443
Indiana	34,596	1,102	0	35,698
Iowa	0	2,465	0	2,465
Kentucky	330	0	0	330
Michigan	33,029	880	0	33,909
Minnesota	0	551	0	551
Pennsylvania	272	0	0	272
Total interstate	e 68,227	6,561	0	74,788

	Mod			
Destination	Truck	Rail	Barge	Total
	the	usands of b	ushels	
Alabama	0	242	2,819	3,061
Connecticut	0	707	0	707
Delaware	0	1,759	0	1,759
Florida	0	497	0	497
Georgia	0	6,465	0	6,465
Illinois	1,240	0	0	1,240
Indiana	0	338	0	338
Kentucky	1,662	23	0	1,685
Louisiana	0	0	1,124	1,124
Maryland	0	2,034	0	2,034
Massachusetts	0	704	0	704
Mississippi	0	0	158	158
New York	135	4,603	0	4,738
North Carolina	56	33,627	0	33,683
Pennsylvania	0	1,751	0	1,751
South Carolina	0	2,636	0	2,636
Tennessee	280	6,683	477	7,440
Virginia	48	6,794	0	6,842
Toledo	34,000	11,633	0	45,633
North Atlantic	0	38,000	0	38,000
South Atlantic	0	64,000	0	64,000
Louisiana Gulf	0	0	40,000	40,000
Total interstate	37,421	182,496	44,578	264,495
Intrastate	83,769	11,594	0	95,363
Total 1	21,190	194,090	44,578	359,858

^a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

^b Shipments to ports are treated as separate destinations.

Table A-18. Tennessee, 1983

Mode of transportation						
Origin	Truck	Rail	Barge	Total		
thousands of bushels						
Alabama	286	0	0	286		
Arkansas	304	0	0	304		
Georgia	186	0	0	186		
Illinois	538	3,668	9,760	13,966		
Indiana	4,348	16,079	2,575	23,002		
Iowa	16	5,855	5,522	11,393		
Kentucky	1,582	744	4,907	7,233		
Michigan	0	3,147	0	3,147		
Minnesota	0	0	11,771	11,771		
Mississippi	20	2	0	22		
Missouri	0	0	491	491		
Nebraska	0	301	0	301		
Ohio	280	6,683	477	7,440		
Oklahoma	0	0	54	54		
South Dakota	0	252	0	252		
Wisconsin	0	0	2,267	2,267		
Total interstate	7,560	36,731	37,824	82,115		

	Mode	of transpor	tation	
Destination	Truck	Rail	Barge	Total
	thou	sands of bu	shels	
Alabama	577	377	0	954
Arkansas	10	0	0	10
Florida	0	128	0	128
Georgia	75	255	0	330
Indiana	0	283	0	283
Kentucky	1,572	0	0	1,572
Louisiana	0	128	292	420
Mississippi	170	1,606	0	1,776
Missouri	100	0	0	100
Louisiana Gulf	0	0	700	700
Total interstate	2,504	2,777	992	6,273
Intrastate	11,031	262	0	11,293
Total	13,535	3,039	992	17,566

^a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

Appendix B

1982 Receipts and Shipments of Corn by State for All States (Rail and Barge Only)

Table B-1. Alabama, 1982

Corn Receipts^a from Various Origins

	Mode of t	ransportation	
Origin	Rail	Barge	Total
	thousand	is of bushels	
Georgia	241	208	449
Illinois	12,205	7,188	19,393
Indiana	19,378	1,900	21,278
Iowa	0	1,413	1,413
Kentucky	5,102	5,193	10,295
Minnesota	0	7,560	7,560
Missouri	0	1,708	1,708
Ohio	224	945	1,169
Tennessee	1,652	238	1,890
Wisconsin	0	169	169
Total interstate	38,802	26,522	65,324

	Mode of tr	ansportation	
Destination	Rail	Barge	Total
	thousand	s of bushels	
Florida	271	0	271
Georgia	257	0	257
Louisiana	0	86	86
Mississippi	971	0	971
North Carolina	71	0	71
Tennessee	0	51	51
Virginia	44	0	44
Eastern Gulf	0	2,000	2,000
Louisiana Gulf	0	650	650
Total interstate	1,614	2,787	4,401
Intrastate	126	875	1,001
Total	1,740	3,662	5,402

a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

Table B-2. Arizona, 1982

	Mode of transportation				
Origin	Rail	Barge	Total		
	thousands of bushels				
Kansas	3,064	0	3,064		
Minnesota	459	0	459		
Missouri	1,900	0	1,900		
Nebraska	1,583	0	1,583		
South Dakota	3,490	0	3,490		
Total interstate	10,496	0	10,496		

a Receipts at ports are not included.

Table B-3. Arkansas, 1982

Corn Receipts^a from Various Origins

	Mode of transportation				
Origin	Rail	Barge	Total		
	thousands of bushels				
Illinois	18,673	2,566	21,239		
Indiana	0	167	167		
Iowa	21,125	159	21,284		
Kansas	1,019	0	1,019		
Louisiana	0	107	107		
Minnesota	2,233	115	2,348		
Missouri	3,017	278	3,295		
Nebraska	6,021	0	6,021		
South Dakota	3,490	0	3,490		
Total interstate	55,578	3,392	58,970		

	Mode of transportation		
Destination	Rail	Barge	Total
	thousand	s of bushels	
Louisiana Gulf	0	161	161
Total interstate Intrastate ^c	0	161	161
Total	0	161	161

a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

^c Intrastate shipments were not reported.

Table B-4. California, 1982

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Colorado	1,749	0	1,749
Iowa	8,727	0	8,727
Kansas	3,345	0	3,345
Minnesota	975	0	975
Missouri	3,082	0	3,082
Nebraska	29,049	0	29,049
North Dakota	339	0	339
South Dakota	354	0	354
Texas	1,096	0	1,096
Total interstate	48,716	0	48,716

Corn Shipments^b to Various Destinations

	Mode of tr	Mode of transportation	
Destination	Rail	Barge	Total
	thousand	s of bushels	
Intrastate	261	0	261
Total	261	0	261

a Receipts at ports are not included.

Table B-5. Florida, 1982

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Alabama	271	0	271
Georgia	5,751	0	5,751
Illinois	3,044	0	3,044
Indiana	6,986	0	6,986
Kentucky	3,058	0	3,058
North Carolina	840	0	840
Ohio	840	0	840
South Carolina	3,116	0	3,116
Tennessee	242	0	242
Total interstate	24,148	0	24,148

	Mode of transportation			
Destination	Rail	Barge	Total	
	thousands of bushels			
Georgia	476	0	476	
Total interstate	476	0	476	
Intrastate	862	0	862	
Total	1,338	0	1,338	

a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

^b Shipments to ports are treated as separate destinations.

Table B-6. Georgia, 1982

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Alabama	257	0	257
Florida	476	0	476
Illinois	20,049	0	20,049
Indiana	44,396	0	44,396
Kentucky	1,907	0	1,907
Michigan	256	0	256
North Carolina	4,255	0	4,255
Ohio	6,324	0	6,324
South Carolina	3,000	0	3,000
Tennessee	239	0	239
Texas	136	0	136
Total interstate	81,295	0	81,295

Corn Shipments^b to Various Destinations

	Mode of transportation		
Destination	Rail	Barge	Total
	thousand	s of bushels	
Alabama	241	208	449
Florida	5,751	0	5,751
South Carolina	123	0	123
Total interstate	6,115	208	6,323
Intrastate	2,535	0	2,535
Total	8,650	208	8,858

a Receipts at ports are not included.

Table B-7. Illinois, 1982

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Indiana	3,331	0	3,331
Iowa	7,955	157	8,112
Louisiana	0	50	50
Minnesota	3,483	0	3,483
Missouri	0	52	52
Ohio	0	58	58
Wisconsin	735	0	735
Total interstate	15,504	317	15,821

	Mode o		
Destination	Rail	Barge	Total
	thousa	nds of bushels	
Alabama	12,205	7,188	19,393
Arkansas	18,673	2,566	21,239
Delaware	696	0	696
Florida	3,044	0	3,044
Georgia	20,049	0	20,049
Indiana	4,682	53	4,735
Iowa	2,305	52	2,357
Kentucky	10	0	10
Louisiana	5,015	113	5,128
Maryland	5,709	0	5,709
Michigan	325	0	325
Mississippi	29,146	2,062	31,208
Missouri	823	827	1,650
New York	679	0	679
North Carolina	543	0	543
Ohio	704	0	704
Oklahoma	1,075	210	1,285
Pennsylvania	1,824	0	1,824
South Carolina	120	0	120
Tennessee Texas	9,412	6,639 0	16,051
Virginia	4,011 4,701	0	4,011 4,701
Chicago/Duluth	1,000	0	1,000
North Atlantic	9,000	0	9,000
South Atlantic	28,000	0	28,000
Eastern Gulf	6,000	2,000	8,000
Louisiana Gulf	72,000	537,000	609,000
Total interstate	241,751	558,710	800,461
Intrastate	31,544	436	31,980
Total	273,295	559,146	832,441

a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

b Shipments to ports are treated as separate destinations.

Table B-8. Indiana, 1982

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Illinois	4,682	53	4,735
Louisiana	0	100	100
Ohio	0	63	63
Texas	279	0	279
Total interstate	4,961	216	5,177

Corn Shipments^b to Various Destinations

	Mode o	of transportation	
Destination	Rail	Barge	Total
	thouse	ands of bushels	
Alabama	19,378	1,900	21,278
Arkansas	0	167	167
Florida	6,986	0	6,986
Georgia	44,396	0	44,396
Illinois	3,331	0	3,331
Kentucky	2,958	0	2,958
Maryland	24,032	0	24,032
Mississippi	2,599	45	2,644
New York	700	0	700
North Carolina	7,816	0	7,816
Ohio	1,653	0	1,653
Pennsylvania	7,843	0	7,843
South Carolina	1,630	0	1,630
Tennessee	11,259	1,728	12,987
Virginia	3,342	0	3,342
Chicago/Duluth	2,000	0	2,000
Toledo	1,653	0	1,653
North Atlantic	20,000	0	20,000
South Atlantic	100,000	0	100,000
Eastern Gulf	3,000	0	3,000
Louisiana Gulf	0	68,953	68,953
Total interstate	264 ,576	72,793	337,369
Intrastate	5,164	0	5,164
Total	269,740	72,793	342,533

^a Receipts at ports are not included.

Table B-9. lowa, 1982

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Illinois	2,305	52	2,357
Louisiana	0	50	50
Minnesota	1,740	0	1,740
Nebraska	883	0	883
Total interstate	4,928	102	5,030

	Mode of	transportation	
Destination	Rail	Barge	Total
	thousan	ds of bushels	
Alabama	0	1,413	1,413
Arkansas	21,125	159	21,284
California	8,727	0	8,727
Colorado	351	0	351
Illinois	7,955	157	8,112
Kansas	204	0	204
Louisiana	1,103	2,699	3,802
Minnesota	857	0	857
Mississippi	816	688	1,504
Missouri	12,183	0	12,183
Nebraska	4,569	0	4,569
Oklahoma	2,941	0	2,941
Tennessee	7,503	1,701	9,204
Texas	20,818	0	20,818
Wisconsin	2,611	0	2,611
Chicago/Duluth	15,000	0	15,000
Louisiana Gulf	9,000	220,000	229,000
Texas Gulf	26,000	0	26,000
Pacific Northwest	8,282	0	8,282
California Ports	4,000	0	4,000
Total interstate	154,045	226,817	380,862
Intrastate	60,756	165	60,921
Total 2	214,801	226,982	441,783

a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

^b Shipments to ports are treated as separate destinations.

Table B-10. Kansas, 1982

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Colorado	140	0	140
Iowa	204	0	204
Missouri	339	0	339
Nebraska	2,583	0	2,583
Total interstate	3,266	0	3,266

Corn Shipments^b to Various Destinations

	Mode of transportation			
Destination	Rail	Barge	Total	
	thousa	nds of bushels		
Arizona	3,064	0	3,064	
Arkansas	1,019	0	1,019	
California	3,345	0	3,345	
Colorado	350	0	350	
Missouri	1,507	0	1,507	
Nebraska	357	0	357	
New Jersey	340	0	340	
South Carolina	490	0	490	
Texas	2,774	0	2,774	
Washington	679	0	679	
Louisiana Gulf	361	0	361	
Texas Gulf	6,000	0	6,000	
Pacific Northwest	679	0	679	
California Ports	6,000	0	6,000	
Total interstate	26,965	0	26,965	
Intrastate	2,277	0	2,277	
Total	29,242	0	29,242	

^a Receipts at ports are not included.

Table B-11. Kentucky, 1982

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Illinois	10	0	10
Indiana	2,958	0	2,958
Ohio	140	49	189
Tennessee	0	53	53
Wisconsin	0	248	248
Total interstate	3,108	350	3,458

	Mode of t	ransportation	
Destination	Rail	Barge	Total
	thousand	is of bushels	
Alabama	5,102	5,193	10,259
Florida	3,058	0	3,058
Georgia	1,907	0	1,907
Louisiana	0	879	879
Mississippi	3,386	737	4,123
North Carolina	966	0	966
South Carolina	499	0	499
Tennessee	860	4,037	4,897
South Atlantic	7,000	0	7,000
Eastern Gulf	1,000	500	1,500
Louisiana Gulf	0	33,000	33,000
Total interstate	23,778	44,346	68,124
Intrastate	1,054	0	1,054
Total	24,832	44,346	69,178

a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

^b Shipments to ports are treated as separate destinations.

Table B-12. Louisiana, 1982

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Alabama	0	86	86
Illinois	5,015	113	5,128
Iowa	1,103	2,699	3,802
Kentucky	0	879	879
Minnesota	52	0	52
Missouri	340	1,500	1,840
Nebraska	445	47	492
Ohio	0	1,171	1,171
Tennessee	0	466	466
Total interstate	6,955	6,961	13,916

Corn Shipments^b to Various Destinations

	Mode of transportation		
Destination	Rail	Barge	Total
	thousand	s of bushels	
Arkansas	0	107	107
Illinois	0	50	50
Indiana	0	100	100
Iowa	0	50	50
Mississippi	0	97	97
Louisiana Gulf	0	1,827	1,827
Total interstate Intrastatec	0	2,231	2,231
Total	0	2,231	2,231

^a Receipts at ports are not included.

Table B-13. Maryland, 1982

Corn Receipts^a from Various Origins

	Mode of tr		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Illinois	5,709	0	5,709
Indiana	24,032	0	24,032
Michigan	5,918	0	5,918
Ohio	4,221	0	4,221
Total interstate	39,880	0	39,880

a Receipts at ports are not included.

Table B-14. Michigan, 1982

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Illinois	325	0	325
Total interstate	325	0	325

	Mode of transportation		
Destination	Rail	Barge	Total
	thousand	s of bushels	
Missouri	0	54	54
Louisiana Gulf	0	291	291
Total interstate	0	345	345
Intrastate	250	0	250
Total	250	345	595

a Receipts at ports are not included.

b Shipments to ports are treated as separate destinations.

c Intrastate shipments were not reported.

b Shipments to ports are treated as separate destinations.

Table B-15. Minnesota, 1982

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand:	s of bushels	
Iowa	857	0	857
Wisconsin	125	0	125
Total interstate	982	0	982

Corn Shipments^b to Various Destinations

	Mode of	transportation	
Destination	Rail	Barge	Total
	thousa	nds of bushels	
Alabama	0	7,560	7,560
Arizona	459	0	459
Arkansas	2,233	115	2,348
California	975	0	975
Illinois	3,483	0	3,483
Iowa	1,740	0	1,740
Louisiana	52	0	52
Mississippi	0	509	509
Missouri	3,828	117	3,945
Oklahoma	474	0	474
Oregon	896	0	896
Tennessee	0	11,486	11,486
Texas	4,769	0	4,769
Wisconsin	2,418	0	2,418
Chicago/Duluth	13,000	0	13,000
Eastern Gulf	0	500	500
Louisiana Gulf	2,500	100,278	102,778
Pacific Northwest	20,887	0	20,887
California Ports	4,000	0	4,000
Total interstate	61,714	120,565	182,279
Intrastate	18,151	0	18,151
Total	79,865	120,565	200,430

a Receipts at ports are not included.

Table B-16. Mississippi, 1982

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Alabama	971	0	971
Illinois	29,146	2,062	31,208
Indiana	2,599	45	2,644
Iowa	816	688	1,504
Kentucky	3,386	737	4,123
Louisiana	0	97	97
Minnesota	0	509	509
Missouri	1,082	420	1,502
Ohio	0	55	55
Tennessee	7,299	0	7,299
Texas	700	0	700
Total interstate	45,999	4,613	50,612

	Mode of transportation			
Destination	Rail	Barge	Total	
	thousand	s of bushels		
Missouri	0	54	54	
Louisiana Gulf	0	291	291	
Total interstate	0	345	345	
Intrastate	250	0	250	
Total	250	345	595	

^a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

^b Shipments to ports are treated as separate destinations.

Table B-17. Missouri, 1982

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Colorado	136	0	136
Illinois	823	827	1,650
Iowa	12,183	0	12,183
Kansas	1,507	0	1,507
Minnesota	3,828	117	3,945
Mississippi	0	54	54
Nebraska	1,297	0	1,297
Total interstate	19,774	998	20,772

Corn Shipments^b to Various Destinations

	Mode of t		
Destination	Rail	Barge	Total
	thousand	ls of bushels	
Alabama	0	1,708	1,708
Arizona	1,900	0	1,900
Arkansas	3,017	278	3,295
California	3,082	0	3,082
Illinois	0	52	52
Kansas	339	0	339
Louisiana	340	1,500	1,840
Mississippi	1,082	420	1,502
Oklahoma	3,126	0	3,126
Tennessee	0	1,914	1,914
Texas	8,639	0	8,639
Louisiana Gulf	0	49,685	49,685
Texas Gulf	3,000	0	3,000
Total interstate	24,525	55,557	80,082
Intrastate	1,631	57	1,688
Total	26,156	55,614	81,770

^a Receipts at ports are not included.

Table B-18. Nebraska, 1982

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand:	s of bushels	
Iowa	4,569	0	4,569
Kansas	357	0	357
Total interstate	4,926	0	4,926

	Mode	ı	
Destination	Rail	Barge	Total
	thous	ands of bushels	
Arizona	1,583	0	1,583
Arkansas	6,021	0	6,021
California	29,049	0	29,049
Colorado	19,216	0	19,216
Iowa	883	0	883
Kansas	2,583	0	2,583
Louisiana	445	47	492
Missouri	1,297	0	1,297
Oregon	414	0	414
South Dakota	141	0	141
Texas	7,698	0	7,698
Washington	1,067	0	1,067
Texas Gulf	10,000	0	10,000
Pacific Northwes	t 12,000	0	12,000
California Ports	10,000	0	10,000
Total interstate	102,397	47	102,444
Intrastate	4,066	0	4,066
Total	106,463	47	106,510

a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

^b Shipments to ports are treated as separate destinations.

Table B-19. North Carolina, 1982

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Alabama	71	0	71
Illinois	543	0	543
Indiana	7,816	0	7,816
Kentucky	966	0	966
Michigan	629	0	629
Ohio	23,986	0	23,986
South Carolina	257	0	257
Texas	139	0	139
Virginia	588	0	588
Total interstate	34,995	0	34,995

Corn Shipments^b to Various Destinations

	Mode of transportation		
Destination	Rail	Barge	Total
	thousand	s of bushels	
Florida	840	0	840
Georgia	4,255	0	4,255
South Carolina	733	0	733
Virginia	2,498	0	2,498
South Atlantic	6,000	1,887	7,887
Total interstate	14,326	1,887	16,213
Intrastate	7,105	0	7,105
Total	21,431	1,887	23,318

a Receipts at ports are not included.

Table B-20. North Dakota, 1982

	Mode of transportation		
Destination	Rail	Barge	Total
	thousand	s of bushels	
California	339	0	339
Washington	211	0	211
Wisconsin	269	0	269
Pacific Northwest	4,286	0	4,286
Total interstate Intrastate ^b	5,105	0	5,105
Total	5,105	0	5,105

^a Shipments to ports are treated as separate destinations.

^b Shipments to ports are treated as separate destinations.

b Intrastate shipments were not reported.

Table B-21. Ohio, 1982

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Illinois	704	0	704
Indiana	1,653	0	1,653
Total interstate	2,357	0	2,357

Corn Shipments^b to Various Destinations

	Mode of		
Destination	Rail	Barge	Total
	thousan	ds of bushels	
Alabama	224	945	1,169
Florida	840	0	840
Georgia	6,324	0	6,324
Illinois	0	58	58
Indiana	0	63	63
Kentucky	140	49	189
Louisiana	0	1,171	1,171
Maryland	4,221	0	4,221
Mississippi	0	55	55
New York	1,054	0	1,054
North Carolina	23,986	0	23,986
Pennsylvania	4,840	0	4,840
South Carolina	2,960	0	2,960
Tennessee	3,034	319	3,353
Virginia	5,347	0	5,347
Toledo	3,906	0	3,906
North Atlantic	40,000	0	40,000
South Atlantic	70,000	0	70,000
Louisiana Gulf	0	45,000	45,000
Total interstate	166,876	47,660	214,536
Intrastate	28	59	87
Total	166,904	47,719	214,623

a Receipts at ports are not included.

Table B-22. Oklahoma, 1982

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Illinois	1,075	210	1,285
Iowa	2,941	0	2,941
Minnesota	474	0	474
Missouri	3,126	0	3,126
South Dakota	903	0	903
Total interstate	8,519	210	8,729

a Receipts at ports are not included.

Table B-23. Pennsylvania, 1982

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Illinois	1,824	0	1,824
Indiana	7,843	0	7,843
Michigan	2,414	0	2,414
Ohio	4,840	0	4,840
Texas	354	0	354
Total interstate	17,275	0	17,275

	Mode of tr		
Destination	Rail	Barge	Total
	thousand	s of bushels	
New York	643	0	643
Total interstate Intrastate ^c	643	0	643
Total	643	0	643

^a Receipts at ports are not included.

b Shipments to ports are treated as separate destinations.

^b Shipments to ports are treated as separate destinations.

c Intrastate shipments were not reported.

Table B-24. South Carolina, 1982

Corn Receipts^a from Various Origins

	Mode of transportation				
Origin	Rail	Barge	Total		
	thousands of bushels				
Georgia	123	0	123		
Illinois	120	0	120		
Indiana	1,630	0	1,630		
Kansas	490	0	490		
Kentucky	499	0	499		
North Carolina	733	0	733		
Ohio	2,960	0	2,960		
Total interstate	6,555	0	6,555		

Corn Shipments^b to Various Destinations

	Mode of transportation		
Destination	Rail	Barge	Total
	thousand	s of bushels	-
Florida	3,116	0	3,116
Georgia	3,000	0	3,000
North Carolina	257	0	257
Total interstate	6,373	0	6,373
Intrastate	385	0	385
Total	6,758	0	6,758

a Receipts at ports are not included.

Table B-25. South Dakota, 1982

	Mode of		
Destination	Rail	Barge	Total
	thousar	ads of bushels	
Arizona	3,490	0	3,490
Arkansas	3,490	0	3,490
California	354	0	354
Oklahoma	903	0	903
Oregon	410	0	410
Texas	910	0	910
Washington	3,900	0	3,900
Pacific Northwest	8,000	0	8,000
Total interstate Intrastate ^b	21,457	0	21,457
Total	21,457	0	21,457

a Shipments to ports are treated as separate destinations.

 $^{^{\}mathrm{b}}$ Shipments to ports are treated as separate destinations.

^b Intrastate shipments were not reported.

Table B-26. Tennessee, 1982

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	ls of bushels	
Alabama	0	51	51
Illinois	9,412	6,639	16,051
Indiana	11,259	1,728	12,987
Iowa	7,503	1,701	9,204
Kentucky	860	4,037	4,897
Minnesota	0	11,486	11,486
Missouri	0	1,914	1,914
Ohio	3,034	319	3,353
Wisconsin	0	54	54
Total interstate	32,068	27,929	59,997

Corn Shipments^b to Various Destinations

	Mode of tr	Mode of transportation			
Destination	Rail	Barge	Total		
	thousand	s of bushels			
Alabama	1,652	238	1,890		
Florida	242	0	242		
Georgia	239	0	239		
Kentucky	0	53	53		
Louisiana	0	466	466		
Mississippi	7,299	0	7,299		
Louisiana Gulf	0	1,100	1,100		
Total interstate	9,432	1,857	11,289		
Intrastate	366	0	366		
Total	9, 798	1,857	11,655		

a Receipts at ports are not included.

Table B-27. Texas, 1982

Corn Receipts^a from Various Origins

	Mode of transportation			
Origin	Rail	Barge	Total	
	thousands of bushels			
Illinois	4,011	0	4,011	
Iowa	20,818	0	20,818	
Kansas	2,774	0	2,774	
Minnesota	4,769	0	4,769	
Missouri	8,639	0	8,639	
Nebraska	7,698	0	7,698	
South Dakota	910	0	910	
Total interstate	49,619	0	49,619	

	Mode of tr		
Destination	Rail	Barge	Total
	thousand	s of bushels	
California	1,096	0	1,096
Georgia	136	0	136
Indiana	279	0	279
Mississippi	700	0	700
North Carolina	139	0	139
Pennsylvania	354	0	354
Washington	511	0	511
Louisiana Gulf	0	30	30
Texas Gulf	5,000	0	5,000
California Ports	1,000	0	1,000
Total interstate	9,215	30	9,245
Intrastate	3,470	61	3,531
Total	12,685	91	12,776

a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

^b Shipments to ports are treated as separate destinations.

Table B-28. Virginia, 1982

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand:	s of bushels	
Illinois	4,701	0	4,701
Indiana	3,342	0	3,342
Michigan	808	0	808
North Carolina	2,498	0	2,498
Ohio	5,347	0	5,347
Total interstate	16,696	0	16,696

Corn Shipments^b to Various Destinations

	Mode of t	ransportation	
Destination	Rail	Barge	Total
thousands of bushels			
North Carolina	588	0	588
South Atlantic	0	2,268	2,268
Total interstate	588	2,268	2,856
Intrastate	513	0	513
Total	1,101	2,268	3,369

a Receipts at ports are not included.

Table B-29. Washington, 1982

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousands	s of bushels	
Kansas	679	0	679
Nebraska	1,067	0	1,067
North Dakota	211	0	211
South Dakota	3,900	0	3,900
Texas	511	0	511
Total interstate	6,368	0	6,368

	Mode of to	ransportation		
Destination	Rail	Barge	Total	
	thousand	s of bushels		
Oregon	0	19	19	
Pacific Northwest	8,062	0	8,062	
Total interstate	8,062	19	8,081	
Intrastate	769	73	842	
Total	8,831	92	8,923	

^a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

^b Shipments to ports are treated as separate destinations.

Table B-30. Wisconsin, 1982

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Iowa	2,611	0	2,611
Minnesota	2,418	0	2,418
North Dakota	269	0	269
Total interstate	5,298	0	5,298

Corn Shipments^b to Various Destinations

	Mode of transportation			
Destination	Rail	Barge	Total	
	thousand	ls of bushels		
Alabama	0	169	169	
Illinois	735	0	735	
Kentucky	0	248	248	
Minnesota	125	0	125	
Tennessee	0	54	54	
Louisiana Gulf	0	29,000	29,000	
Total interstate	860	29,471	30,331	
Intrastate	343	0	343	
Total	1,203	29,471	30,674	

^a Receipts at ports are not included.

Table B-31. California Ports, 1982

Corn Receipts from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Iowa	4,000	0	4,000
Kansas	6,000	0	6,000
Minnesota	4,000	0	4,000
Nebraska	10,000	0	10,000
Texas	1,000	0	1,000
Total interstate	25,000	0	25,000

Table B-32. Chicago/Duluth Ports, 1982

Corn Receipts from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Illinois	1,000	0	1,000
Indiana	2,000	0	2,000
Iowa	15,000	0	15,000
Minnesota	13,000	0	13,000
Total interstate	31,000	0	31,000

^b Shipments to ports are treated as separate destinations.

Table B-33. Eastern Gulf Ports, 1982

Corn Receipts from Various Origins

	Mode of transportation			
Origin	Rail	Barge	Total	
	thousands of bushels			
Alabama	0	2,000	2,000	
Illinois	6,000	2,000	8,000	
Indiana	3,000	0	3,000	
Kentucky	1,000	500	1,500	
Minnesota	0	500	500	
Total interstate	10,000	5,000	15,000	

Table B-34. Louisiana Gulf Ports, 1982

Corn Receipts from Various Origins

	Mode of transportation			
Origin	Rail	Barge	Total	
	thousan	ds of bushels		
Alabama	0	650	650	
Arkansas	0	161	161	
Illinois	72,000	537,000	609,000	
Indiana	0	68,953	68,953	
Iowa	9,000	220,000	229,000	
Kansas	361	0	361	
Kentucky	0	33,000	33,000	
Louisiana	0	1,827	1,827	
Minnesota	2,500	100,278	102,778	
Mississippi	0	291	291	
Missouri	0	49,685	49,685	
Ohio	0	45,000	45,000	
Tennessee	0	1,100	1,100	
Texas	0	30	30	
Wisconsin	0	29,000	29,000	
Total interstate	83,861	1,086,975	1,170,836	

Table B-35. North Atlantic Ports, 1982

Corn Receipts from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Illinois	9,000	0	9,000
Indiana	20,000	0	20,000
Michigan	8,000	0	8,000
Ohio	40,000	0	40,000
Total interstate	77,000	0	77,000

Table B-36. Pacific Northwest Ports, 1982

Corn Receipts from Various Origins

	Mode of tr			
Origin	Rail	Barge	Total	
	thousands of bushels			
Iowa	8,282	0	8,282	
Kansas	679	0	679	
Minnesota	20,887	0	20,887	
Nebraska	12,000	0	12,000	
North Dakota	4,286	0	4,286	
Oregon	269	0	269	
South Dakota	8,000	0	8,000	
Washington	8,062	0	8,062	
Total interstate	62,465	0	62,465	

Table B-37. South Atlantic Ports, 1982

Corn Receipts from Various Origins

	Mode of transportation					
Origin	Rail	Barge	Total			
	thousands of bushels					
Illinois	28,000	0	28,000			
Indiana	100,000	0	100,000			
Kentucky	7,000	0	7,000			
Michigan	32,000	0	32,000			
North Carolina	6,000	1,887	7,887			
Ohio	70,000	0	70,000			
Virginia	0	2,268	2,268			
Total interstate	243,000	4,155	247,155			

Table B-38. Texas Gulf Ports, 1982

Corn Receipts from Various Origins

	Mode of transportation			
Origin	Rail	Barge	Total	
	thousands of bushels			
Iowa	26,000	0	26,000	
Kansas	6,000	0	6,000	
Missouri	3,000	0	3,000	
Nebraska	10,000	0	10,000	
Texas	5,000	0	5,000	
Total interstate	50,000	0	50,000	

Table B-39. Toledo Port Area, 1982

Corn Receipts from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand:	s of bushels	
Indiana	1,653	0	1,653
Ohio	3,906	0	3,906
Total interstate	5,559	0	5,559

Appendix C

1983 Receipts and Shipments of Corn by State for All States (Rail and Barge Only)

Table C-1. Alabama, 1983

Corn Receipts^a from Various Origins

	Mode of transportation			
Origin	Rail	Barge	Total	
	thousand	ls of bushels		
Florida	129	0	129	
Georgia	619	0	619	
Illinois	6,384	5,875	12,259	
Indiana	12,881	1,287	14,168	
Iowa	1,253	6,826	8,079	
Kentucky	2,890	3,900	6,790	
Minnesota	281	13,054	13,335	
Missouri	0	1,041	1,041	
North Carolina	74	0	74	
Ohio	242	2,819	3,061	
Tennessee	377	0	377	
Wisconsin	0	2,653	2,653	
Total interstate	25,130	37,455	62,585	

•	Mode of tr	ansportation	
Destination	Rail	Barge	Total
	thousand	s of bushels	
Florida	2,099	0	2,099
Georgia	604	18	622
Kentucky	134	0	134
Louisiana	0	305	305
Mississippi	487	0	487
Eastern Gulf	0	500	500
Louisiana Gulf	0	1,000	1,000
Total interstate	3,324	1,823	5,147
Intrastate	237	75	312
Total	3,561	1,898	5,459

^a Receipts at ports are not included.

b Shipments to ports are treated as separate destinations.

Table C-2. Arizona, 1983

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Iowa	350	0	350
Kansas	2,596	0	2,596
Minnesota	2,372	0	2,372
Missouri	1,176	0	1,176
Nebraska	765	0	765
North Dakota	935	0	935
South Dakota	1,285	0	1,285
Total interstate	9,479	0	9,479

a Receipts at ports are not included.

Table C-3. Arkansas, 1983

Corn Receipts^a from Various Origins

	Mode of transportation			
Origin	Rail	Barge	Total	
	thousand	s of bushels		
Illinois	15,345	2,968	18,313	
Indiana	4,462	2,765	7,227	
Iowa	21,178	559	21,737	
Kansas	1,855	0	1,855	
Louisiana	0	56	56	
Minnesota	4,213	387	4,600	
Mississippi	707	0	707	
Missouri	3,821	49	3,870	
Nebraska	14,936	0	14,936	
Oklahoma	137	0	137	
South Dakota	2,534	0	2,534	
Total interstate	69,188	6,784	75,972	

	Mode of transportation			
Destination	Rail	Barge	Total	
	thousand.	s of bushels		
Illinois	0	54	54	
Louisiana	0	206	206	
Louisiana Gulf	0	600	600	
Total interstate Intrastate ^c	0	860	860	
Total	0	860	860	

^a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

c Intrastate shipments were not reported.

Table C-4. California, 1983

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Colorado	679	0	679
Iowa	1,301	0	1,301
Kansas	1,913	0	1,913
Minnesota	6,545	0	6,545
Missouri	679	0	679
Nebraska	32,908	0	32,908
South Dakota	2,758	0	2,758
Texas	2,004	0	2,004
Total interstate	48,787	0	48,787

Corn Shipments^b to Various Destinations

	Mode of tr	Mode of transportation		
Destination	Rail	Barge	Total	
	thousands of bushels			
New York	207	0	207	
Ohio	120	0	120	
Total interstate Intrastate ^c	327	0	327	
Total	327	0	327	

^a Receipts at ports are not included.

Table C-5. Delaware, 1983

Corn Shipments to Various Origins

	Mode of transportation			
Origin	Rail	Barge	Total	
	thousands of bushels			
Maryland	1,503	0	1,503	
Total interstate	1,503	0	1,503	
Intrastate	3,066	0	3,066	
Total	4,569	0	4,569	

 $^{^{\}rm b}$ Shipments to ports are treated as separate destinations.

^c Intrastate shipments were not reported.

Table C-6. Florida, 1983

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Alabama	2,099	0	2,099
Georgia	6,959	0	6,959
Illinois	5,048	0	5,048
Indiana	6,143	0	6,143
Iowa	261	0	261
Kentucky	3,750	0	3,750
Minnesota	417	0	417
North Carolina	375	0	375
Ohio	497	0	497
South Carolina	1,364	0	1,364
Tennessee	128	0	128
Total interstate	27,041	0	27,041

Corn Shipments^b to Various Destinations

	Mode of transportation		
Destination	Rail	Barge	Total
	thousand	s of bushels	
Alabama	129	0	129
Total interstate	129	0	129
Intrastate	624	0	624
Total	753	0	753

a Receipts at ports are not included.

Table C-7. Georgia, 1983

Corn Receipts^a from Various Origins

	Mode of tr	ansportation	
Origin	Rail	Barge	Total
	thousand	s of bushels	
Alabama	604	18	622
Illinois	15,993	46	16,039
Indiana	29,059	0	29,059
Iowa	281	0	281
Kentucky	7,489	46	7,535
Minnesota	277	0	277
North Carolina	381	0	381
Ohio	6,465	0	6,465
South Carolina	123	0	123
Tennessee	255	0	255
Total interstate	60,927	110	61,037

	Mode of transportation		
Destination	Rail	Barge	Total
	thousand	s of bushels	
Alabama	619	0	619
Florida	6,959	0	6,959
Louisiana	0	48	48
North Carolina	118	0	118
Louisiana Gulf	0	48	48
Total interstate	7,696	96	7,792
Intrastate	5,199	0	5,199
Total	12,895	96	12,991

a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

^b Shipments to ports are treated as separate destinations.

Table C-8. Illinois, 1983

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand:	s of bushels	
Arkansas	0	54	54
Indiana	5,017	0	5,017
Iowa	28,297	0	28,297
Louisiana	0	275	275
Michigan	2,325	0	2,325
Minnesota	5,203	57	5,260
Missouri	577	0	577
Wisconsin	2,119	0	2,119
Total interstate	43,538	386	43,924

	Mode of	transportation	
Destination	Rail	Barge	Total
	thousan	ds of bushels	
Alabama	6,384	5,875	12,259
Arkansas	15,345	2,968	18,313
Florida	5,048	0	5,048
Georgia	15,993	46	16,039
Indiana	5,456	53	5,509
Iowa	404	0	404
Kentucky	1,198	51	1,249
Louisiana	3,548	196	3,744
Maryland	600	0	600
Minnesota	1,184	0	1,184
Mississippi	23,087	1,700	24,787
Missouri	1,136	105	1,241
North Carolina	260	0	260
Ohio	1,443	0	1,443
Oklahoma	0	223	223
Pennsylvania	547	0	547
Tennessee	3,668	9,760	13,428
Texas	12,000	0	12,000
Chicago	2,000	0	2,000
North Atlantic	1,900	0	1,900
South Atlantic	4,680	0	4,680
Eastern Gulf	5,000	899	5,899
Louisiana Gulf	48,000	512,000	560,000
Texas Gulf	4,032	221	4,253
Total interstate	162,913	534,097	697,010
Intrastate	67,155	216	67,371
Total	230,068	534,313	764,381

^a Receipts at ports are not included.

 $^{^{\}rm b}$ Shipments to ports are treated as separate destinations.

Table C-9. Indiana, 1983

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Illinois	5,456	53	5,509
Iowa	988	0	988
Kentucky	393	54	447
Minnesota	0	57	57
Ohio	338	0	338
Tennessee	283	0	283
Texas	977	0	977
Total interstate	8,435	164	8,599

	Mode of	transportation	
Destination	Rail	Barge	Total
	thousan	ds of bushels	
Alabama	12,881	1,287	14,168
Arkansas	4,462	2,765	7,227
Delaware	5,241	0	5,241
Florida	6,143	0	6,143
Georgia	29,059	0	29,059
Illinois	5,017	0	5,017
Kentucky	2,695	0	2,695
Louisiana	0	512	512
Maryland	20,000	0	20,000
Mississippi	1,989	149	2,138
Missouri	272	0	272
New York	2,100	0	2,100
North Carolina	8,393	0	8,393
Oklahoma	0	202	202
Pennsylvania	14,000	0	14,000
South Carolina	2,349	0	2,349
Tennessee	16,079	2,575	18,654
Texas	225	0	225
Virginia	2,461	0	2,461
Chicago	4,000	0	4,000
Toledo	1,102	0	1,102
North Atlantic	16,703	0	16,703
South Atlantic	67,538	0	67,538
Eastern Gulf	1,000	0	1,000
Louisiana Gulf	0	46,000	46,000
Total interstate	223,709	53,490	277,199
Intrastate	11,280	0	11,280
Total	234,989	53,490	288,479

^a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

Table C-10. Iowa, 1983

	Mode of transportation			
Origin	Rail	Barge	Total	
thousands of bushels				
Illinois	404	0	404	
Kentucky	0	48	48	
Minnesota	15,729	0	15,729	
Nebraska	2,314	0	2,314	
Total interstate	18,447	48	18,495	

	Mode of	transportation	
Destination	Rail	Barge	Total
	thousan	ds of bushels	
Alabama	1,253	6,826	8,079
Arizona	350	0	350
Arkansas	21,178	559	21,737
California	1,301	0	1,301
Florida	261	0	261
Georgia	281	0	281
Illinois	28,297	0	28,297
Indiana	988	0	988
Kansas	1,430	0	1,430
Kentucky	0	120	120
Louisiana	2,516	4,018	6,534
Minnesota	1,208	0	1,208
Mississippi	2,606	858	3,464
Missouri	54,376	331	54,707
Nebraska	3,212	0	3,212
Ohio	2,465	0	2,465
Oklahoma	3,529	0	3,529
Pennsylvania	339	0	339
Tennessee	5,855	5,522	11,377
Texas	39,039	0	39,039
Virginia	297	0	297
Wisconsin	3,011	0	3,011
Chicago	65,500	65,500	
South Atlantic	500	0	500
Eastern Gulf	138	0	138
Louisiana Gulf	15,000	240,000	255,000
Texas Gulf	13,013	0	13,013
Pacific Northwes	t 4,659	0	4,659
California Ports	1,501	0	1,501
Total interstate	274,103	258,234	532,337
Intrastate	120,933	229	121,162
Total	395,036	258,463	653,499

a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

Table C-11. Kansas, 1983

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Iowa	1,430	0	1,430
Missouri	1,035	0	1,035
Nebraska	5,993	0	5,993
Texas	696	0	696
Total interstate	9,154	0	9,154

Corn Shipments^b to Various Destinations

	Mode of transportation			
Destination	Rail	Barge	Total	
	thousand	s of bushels		
Arizona	2,596	0	2,596	
Arkansas	1,855	0	1,855	
California	1,913	0	1,913	
Colorado	350	0	350	
Louisiana	0	104	104	
Missourl	550	0	500	
Texas	17,185	0	17,185	
Texas Gulf	8,592	0	8,592	
California Ports	2,000	0	2,000	
Total interstate	35,041	104	35,145	
Intrastate	423	0	423	
Total	35,464	104	35,568	

a Receipts at ports are not included.

Table C-12. Kentucky, 1983

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Alabama	134	0	134
Illinois	1,198	51	1,249
Indiana	2,695	0	2,695
Iowa	0	120	120
Ohio	23	0	23
Wisconsin	1,711	0	1,711
Total interstate	5,761	171	5,932

	Mode of transportation			
Destination	Rail	Barge	Total	
thousands of bushels				
Alabama	2,890	3,900	6,790	
Florida	3,750	0	3,750	
Georgia	7,489	46	7,535	
Indiana	393	54	447	
Iowa	0	48	48	
Louisiana	0	156	156	
Mississippi	2,144	67	2,211	
Missouri	0	50	50	
North Carolina	763	0	763	
South Carolina	237	0	237	
Tennessee	744	4,907	5,651	
Eastern Gulf	700	30	730	
Louisiana Gulf	0	15,000	15,000	
Total interstate	19,110	24,258	43,368	
Intrastate	900	0	900	
Total	20,010	24,258	44,268	

a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

^b Shipments to ports are treated as separate destinations.

Table C-13. Louisiana, 1983

Corn Receipts^a from Various Origins

	Mode of to	ransportation	
Origin	Rail	Barge	Total
	thousand	s of bushels	
Alabama	0	305	305
Arkansas	0	206	206
Georgia	0	48	48
Illinois	3,548	196	3,744
Indiana	0	512	512
Iowa	2,516	4,018	6,534
Kansas	0	104	104
Kentucky	0	156	156
Michigan	0	149	149
Minnesota	125	515	640
Missouri	240	730	970
Nebraska	1,791	282	2,073
Ohio	0	1,124	1,124
Pennsylvania	0	58	58
Tennessee	128	292	420
Wisconsin	0	612	612
Total interstate	8,348	9,307	17,655

Corn Shipments^b to Various Destinations

	Mode of tr		
Destination	Rail	Barge	Total
	thousand	s of bushels	
Arkansas	0	56	56
Illinois	0	275	275
Minnesota	0	104	104
Louisiana Gulf	0	1,547	1,547
Total interstate Intrastate ^c	0	1,982	1,982
Total	0	1,982	1,982

^a Receipts at ports are not included.

Table C-14. Maryland, 1983

Corn Receipts^a from Various Origins

	Mode of tr	ansportation		
Origin	Rail	Barge	Total	
thousands of bushels				
Delaware	1,503	0	1,503	
Illinois	600	0	600	
Indiana	20,000	0	20,000	
Michigan	2,311	0	2,311	
Ohio	2,034	0	2,034	
Virginia	0	152	152	
Total interstate	26,448	152	26,600	

	Mode of transportation		
Destination	Rail	Barge	Total
	thousand	s of bushels	
Delaware	210	0	210
South Atlantic	700	0	700
Total interstate	910	0	910
Intrastate	193	0	193
Total	1,103	0	1,103
		· · · · · · · · · · · · · · · · · · ·	

a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

c Intrastate shipments were not reported.

^b Shipments to ports are treated as separate destinations.

Table C-15. Michigan, 1983

Corn Shipments^a to Various Destinations

	Mode of tr	ansportation	
Destination	Rail	Barge	Total
	thousand	s of bushels	
Connecticut	2,082	0	2,082
Delaware	1,715	0	1,715
Illinois	2,325	0	2,325
Louisiana	0	149	149
Maine	2,386	0	2,386
Maryland	2,311	0	2,311
Massachusetts	1,400	0	1,400
Mississippi	174	0	174
New York	3,391	0	3,391
North Carolina	253	0	253
Ohio	880	0	880
Pennsylvania	1,137	0	1,137
Tennessee	3,147	0	3,147
Vermont	2,107	0	2,107
Virginia	2,000	0	2,000
North Atlantic	7,000	0	7,000
South Atlantic	12,401	0	12,401
Eastern Gulf	500	0	500
Louisiana Gulf	0	500	500
Total interstate Intrastate ^b	45,209	649	45,858
Total	45,209	649	45,858

^a Shipments to ports are treated as separate destinations.

Table C-16. Minnesota, 1983

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Illinois	1,184	0	1,184
Iowa	1,208	0	1,208
Louisiana	0	104	104
Minnesota	67,470	0	67,470
North Dakota	2,421	0	2,421
Wisconsin	0	54	54
Total interstate	72,283	158	72,441

	Mode o		
Destination	Rail	Barge	Total
	thouse	ınds of bushels	
Alabama	281	13,054	13,335
Arizona	2,372	0	2,372
Arkansas	4,213	387	4,600
California	6,545	0	6,545
Florida	417	0	417
Georgia	277	0	277
Illinois	5,203	57	5,260
Indiana	0	57	57
Iowa	15,729	0	15,729
Louisiana	125	515	640
Mississippi	419	300	719
Missouri	1,042	100	1,142
Ohio	551	0	551
Oklahoma	877	0	877
Oregon	136	0	136
Tennessee	0	11,771	11,771
Texas	880	0	880
Wisconsin	41,784	52	41,836
Chicago	1,500	0	1,500
Louisiana Gulf	800	173,000	173,800
Pacific Northwes	t 41,782	0	41,782
California Ports	7,000	0	7,000
Total interstate	131,933	199,293	331,226
Intrastate	67,470	0	67,470
Total	199,403	199,293	398,696

a Receipts at ports are not included.

b Intrastate shipments were not reported.

^b Shipments to ports are treated as separate destinations.

Table C-17. Mississippi, 1983

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousan	ds of bushels	
Alabama	487	0	487
Illinois	23,087	1,700	24,787
Indiana	1,989	149	2,138
Iowa	2,606	858	3,464
Kentucky	2,144	67	2,211
Michigan	174	0	174
Minnesota	419	300	719
Missouri	140	546	686
Ohio	0	158	158
Tennessee	1,606	0	1,606
Texas	141	0	141
Total interstate	32,793	3,778	36,571

Corn Shipments^b to Various Destinations

	Mode of transportation		
Destination	Rail	Barge	Total
	thousand	s of bushels	
Arkansas	707	0	707
Tennessee	2	0	2
Louisiana	0	422	422
Total interstate Intrastate ^c	709	422	1,131
Total	709	422	1,131

a Receipts at ports are not included.

Table C-18. Missouri, 1983

Corn Receipts^a from Various Origins

	Mode of transportation				
Origin	Rail	Barge	Total		
	thousands of bushels				
Illinois	1,136	105	1,241		
Indiana	272	0	272		
Iowa	54,376	331	54,707		
Kansas	550	0	550		
Kentucky	0	50	50		
Minnesota	1,042	100	1,142		
Missouri	812	0	812		
Nebraska	6,789	0	6,789		
Texas	1,018	0	1,018		
Total interstate	65,183	586	65,769		

	Mode of	transportation	
Destination	Rail	Barge	Total
	thousan	ds of bushels	
Alabama	0	1,041	1,041
Arizona	1,176	. 0	1,176
Arkansas	3,821	49	3,870
California	679	0	679
Illinois	577	0	577
Kansas	1,035	0	1,035
Louisiana	240	730	970
Mississippi	140	546	686
Oklahoma	1,357	0	1,357
Tennessee	0	491	491
Texas	10,985	0	10,985
Louisiana Gulf	1,500	35,000	36,500
Texas Gulf	5,462	0	5,462
Total interstate	26,972	37,857	64,829
Intrastate	812	0	812
Total	27,784	37,857	65,641

a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

c Intrastate shipments were not reported.

^b Shipments to ports are treated as separate destinations.

Table C-19. Nebraska, 1983

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Iowa	3,212	0	3,212
Total interstate	3,212	0	3,212

Corn Shipments^b to Various Destinations

	Mode	Mode of transportation		
Destination	Rail	Barge	Total	
	thous	ands of bushels		
Arizona	765	0	765	
Arkansas	14,936	0	14,936	
California	32,908	0	32,908	
Colorado	17,679	0	17,679	
Iowa	2,314	0	2,314	
Kansas	5,993	0	5,993	
Louisiana	1,791	282	2,073	
Missouri	6,789	0	6,789	
Oklahoma	2,443	0	2,443	
Tennessee	301	0	301	
Texas	10,116	0	10,116	
Washington	4,964	0	4,964	
Louisiana Gulf	7,000	0	7,000	
Texas Gulf	20,000	0	20,000	
Pacific Northwes	t 85,000	0	85,000	
California Ports	20,000	0	20,000	
Total interstate	232,999	282	233,281	
Intrastate	3,181	0	3,181	
Total	236,180	282	236,462	

a Receipts at ports are not included.

Table C-20. North Carolina, 1983

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Georgia	118	0	118
Illinois	260	0	260
Indiana	8,393	0	8,393
Kentucky	763	0	763
Michigan	253	0	253
Ohio	33,627	0	33,627
South Carolina	249	0	249
Texas	283	0	283
Virginia	1,011	0	1,011
Total interstate	44,957	0	44,957

	Mode of transportation		
Destination	Rail	Barge	Total
	thousand:	s of bushels	
Alabama	74	0	74
Florida	375	0	375
Georgia	381	0	381
South Carolina	984	0	984
Virginia	480	0	480
South Atlantic	0	322	322
Total interstate	2,294	322	2,616
Intrastate	7,199	0	7,199
Total	9,493	322	9,815

a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

^b Shipments to ports are treated as separate destinations.

Table C-21. North Dakota, 1983

Corn Shipments^a to Various Destinations

	Mode of t	ansportation	
Destination	Rail	Barge	Total
	thousand	s of bushels	
Arizona	935	0	935
Minnesota	2,421	0	2,421
Washington	3,656	0	3,656
Wisconsin	2,051	0	2,051
Pacific Northwest	10,601	0	10,601
Total interstate Intrastate ^b	19,664	0	19,664
Total	19,664	0	19,664

^a Shipments to ports are treated as separate destinations.

Table C-22. Ohio, 1983

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
California	120	0	120
Illinois	1,443	0	1,443
Indiana	1,102	0	1,102
Iowa	2,465	0	2,465
Michigan	880	0	880
Minnesota	551	0	551
Total interstate	6,561	0	6,561

a Receipts at ports are not included.

Table C-23. Oklahoma, 1983

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Illinois	0	223	223
Indiana	0	202	202
Iowa	3,529	0	3,529
Minnesota	877	0	877
Missouri	1,357	0	1,357
Nebraska	2,443	0	2,443
South Dakota	899	0	899
Total interstate	9,105	425	9,530

	Mode of transportation		
Destination	Rail	Barge	Total
	thousand	s of bushels	
Arkansas	137	0	137
Tennessee	0	54	54
Total interstate Intrastate ^c	137	54	191
Total	137	54	191

^a Receipts at ports are not included.

b Intrastate shipments were not reported.

^b Shipments to ports are treated as separate destinations.

c Intrastate shipments were not reported.

Table C-24. Pennsylvania, 1983

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Illinois	547	0	547
Indiana	14,000	0	14,000
Iowa	339	0	339
Michigan	1,137	0	1,137
New York	1,400	0	1,400
Ohio	1,751	0	1,751
Texas	704	0	704
Total interstate	19,878	0	19,878

Corn Shipments^b to Various Destinations

	Mode of transportation		
Destination	Rail	Barge	Total
	thousand:	s of bushels	
Louisiana	0	58	58
North Atlantic	1,500	0	1,500
Total interstate	1,500	58	1,558
Intrastate	250	0	250
Total	1,750	58	1,808

a Receipts at ports are not included.

Table C-25. South Carolina, 1983

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Indiana	2,349	0	2,349
Kentucky	237	0	237
North Carolina	984	0	984
Ohio	2,636	0	2,636
Total interstate	6,206	0	6,206

	Mode of transportation		
Destination	Rail	Barge	Total
	thousand	s of bushels	
Florida	1,364	0	1,364
Georgia	123	0	123
North Carolina	249	0	249
Total interstate	1,736	0	1,736
Intrastate	542	0	542
Total	2,278	0	2,278

a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

^b Shipments to ports are treated as separate destinations.

Table C-26. South Dakota, 1983

Corn Shipments^a to Various Destinations

	ransportation		
Destination	Rail	Barge	Total
	thousand	s of bushels	
Arizona	1,285	0	1,285
Arkansas	2,534	0	2,534
California	2,758	0	2,758
Oklahoma	899	0	899
Oregon	413	0	413
Tennessee	252	0	252
Washington	6,737	0	6,737
Wisconsin	563	0	563
Pacific Northwest	20,000	0	20,000
Total interstate	35,441	0	35,441
Intrastate	911	0	911
Total	36,352	0	36,352

^a Shipments to ports are treated as separate destinations.

Table C-27. Tennessee, 1983

Corn Receipts^a from Various Origins

	transportation		
Origin	Rail	Barge	Total
	thousan	ds of bushels	
Illinois	3,668	9,760	13,428
Indiana	16,079	2,575	18,654
Iowa	5,855	5,522	11,377
Kentucky	744	4,907	5,651
Michigan	3,147	0	3,147
Minnesota	0	11,771	11,771
Mississippi	2	0	2
Missouri	0	491	491
Nebraska	301	0	301
Ohio	6,683	477	7,160
Oklahoma	0	54	54
South Dakota	252	0	252
Wisconsin	0	2,267	2,267
Total interstate	36,731	37,824	74,555

	Mode of transportation		
Destination	Rail	Barge	Total
	thousand	s of bushels	
Alabama	377	0	377
Florida	128	0	128
Georgia	255	0	255
Indiana	283	0	283
Louisiana	128	292	420
Mississippi	1,606	0	1,606
Louisiana Gulf	0	700	700
Total interstate	2,777	992	3,769
Intrastate	262	0	262
Total	3,039	992	4,031

a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

Table C-28. Texas, 1983

Corn Receipts^a from Various Origins

	Mode of transportation			
Origin	Rail	Barge	Total	
	thousands of bushels			
Colorado	3,043	0	3,043	
Illinois	12,000	0	12,000	
Indiana	225	0	225	
Iowa	39,039	0	39,039	
Kansas	17,185	0	17,185	
Minnesota	880	0	880	
Missouri	10,985	0	10,985	
Nebraska	10,116	0	10,116	
Total interstate	93,473	0	93,473	

Corn Shipments^b to Various Destinations

	Mode of transportation		
Destination	Rail	Barge	Total
	thousand	s of bushels	
California	2,004	0	2,004
Indiana	977	0	977
Kansas	696	0	696
Mississippi	141	0	141
Missouri	1,018	0	1,018
North Carolina	283	0	283
Pennsylvania	704	0	704
Washington	129	0	129
Louisiana Gulf	0	163	163
Texas Gulf	13,000	0	13,000
California Ports	5,000	0	5,000
Total interstate	23,952	163	24,115
Intrastate	10,843	0	10,843
Total	34,795	163	34,958

a Receipts at ports are not included.

Table C-29. Virginia, 1983

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Indiana	2,461	0	2,461
Iowa	297	0	297
Michigan	2,000	0	2,000
North Carolina	480	0	480
Ohio	6,794	0	6,794
Total interstate	12,032	0	12,032

	Mode of transportation		
Destination	Rail	Barge	Total
	thousand	s of bushels	
Maryland	0	152	152
North Carolina	1,011	0	1,011
South Atlantic	0	251	251
Total interstate	1,011	403	1,414
Intrastate	791	0	791
Total	1,802	403	2,205

a Receipts at ports are not included.

^b Shipments to ports are treated as separate destinations.

^b Shipments to ports are treated as separate destinations.

Table C-30. Washington, 1983

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand:	s of bushels	
Colorado	204	0	204
Nebraska	4,964	0	4,964
North Dakota	3,656	0	3,656
Oregon	0	251	251
South Dakota	6,737	0	6,737
Texas	129	0	129
Total interstate	15,690	251	15,941

Corn Shipments^b to Various Destinations

	Mode of to			
Destination	Rail	Barge	Total	
	thousands of bushels			
Oregon	0	9	9	
Pacific Northwest	7,679	0	7,679	
Total interstate	7,679	9	7,688	
Intrastate	2,879	195	3,074	
Total	10,558	204	10,762	

a Receipts at ports are not included.

Table C-31. Wisconsin, 1983

Corn Receipts^a from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Iowa	3,011	0	3,011
Minnesota	41,784	52	41,836
North Dakota	2,051	0	2,051
South Dakota	563	0	563
Total interstate	47,409	52	47,461

	Mode of transportation		
Destination	Rail	Barge	Total
	thousand	ls of bushels	
Alabama	0	2,653	2,653
Illinois	2,119	0	2,119
Kentucky	1,711	0	1,711
Louisiana	0	612	612
Minnesota	0	54	54
Tennessee	0	2,267	2,267
Louisiana Gulf	0	47,000	47,000
Total interstate	3,830	52,586	56,416
Intrastate	343	0	343
Total	4,173	52,586	56,759

a Receipts at ports are not included.

b Shipments to ports are treated as separate destinations.

^b Shipments to ports are treated as separate destinations.

Table C-32. California Ports, 1983

Corn Receipts from Various Origins

	Mode of transportation			
Origin	Rail	Barge	Total	
	thousands of bushels			
Iowa	1,501	0	1,501	
Kansas	2,000	0	2,000	
Minnesota	7,000	0	7,000	
Nebraska	20,000	0	20,000	
Texas	5,000	0	5,000	
Total interstate	35,501	0	35,501	

Table C-33. Chicago/Duluth Ports, 1983

Corn Receipts from Various Origins

	Mode of transportation		
Origin	Rail	Barge	Total
	thousand	s of bushels	
Illinois	2,000	0	2,000
Indiana	4,000	0	4,000
Iowa	65,500	0	65,500
Minnesota	1,500	0	1,500
Total interstate	73,000	0	73,000

Table C-34. Eastern Gulf Ports, 1983

Corn Receipts from Various Origins

	Mode of transportation		Total	
Origin	Rail Barge			
	thousands of bushels			
Alabama	0	500	500	
Illinois	5,000	899	5,899	
Indiana	1,000	0	1,000	
Iowa	138	0	138	
Kentucky	700	30	730	
Michigan	500	0	500	
Total interstate	7,338	1,429	8,767	

Table C-35. Louisiana Gulf Ports, 1983

Corn Receipts from Various Origins

	Mode of transportation			
Origin	Rail	Barge	Total	
	thousar	nds of bushels		
Alabama	0	1,000	1,000	
Arkansas	0	600	600	
Georgia	0	48	48	
Illinois	48,000	512,000	560,000	
Indiana	0	46,000	46,000	
Iowa	15,000	240,000	255,000	
Kentucky	0	15,000	15,000	
Louisiana	0	1,547	1,547	
Michigan	0	500	500	
Minnesota	800	173,000	173,800	
Mississippi	0	422	422	
Missouri	1,500	35,000	36,500	
Nebraska	7,000	0	7,000	
Ohio	0	40,000	40,000	
Tennessee	0	700	700	
Texas	0	163	163	
Wisconsin	0	47,000	47,000	
Total interstate	72,300	1,112,980	1,185,280	

Table C-36. North Atlantic Ports, 1983

Corn Receipts from Various Origins

	Mode of tr	Mode of transportation			
Origin	Rail	Barge	Total		
thousands of bushels					
Illinois	1,900	0	1,900		
Indiana	16,703	0	16,703		
Michigan	7,000	0	7,000		
Ohio	38,000	0	38,000		
Pennsylvania	1,500	0	1,500		
Total interstate	65,103	0	65,103		

Table C-37. Pacific Northwest Ports, 1983

Corn Receipts from Various Origins

· · ·	Mode of transportation			
Origin	Rail	Barge	Total	
	thousand	s of bushels		
Colorado	2,000	0	2,000	
Iowa	4,659	0	4,659	
Minnesota	41,782	0	41,782	
Nebraska	85,000	0	85,000	
North Dakota	10,601	0	10,601	
Oregon	498	1,000	1,498	
South Dakota	20,000	0	20,000	
Washington	7,679	0	7,679	
Total interstate	172,219	1,000	173,219	

Table C-38. South Atlantic Ports, 1983

Corn Receipts from Various Origins

	Mode of tr				
Origin	Rail	Barge	Total		
	thousands of bushels				
Illinois	4,680	0	4,680		
Indiana	67,538	0	67,538		
Iowa	500	0	500		
Maryland	700	0	700		
Michigan	12,401	0	12,401		
North Carolina	0	322	322		
Ohio	64,000	0	64,000		
Virginia	0	251	251		
Total interstate	149,819	573	150,392		

Table C-39. Texas Gulf Ports, 1983

Corn Receipts from Various Origins

	Mode of transportation			
Origin	Rail	Barge	Total	
	thousand	s of bushels		
Illinois	4,032	221	4,253	
Iowa	13,013	0	13,013	
Kansas	8,592	0	8,592	
Missouri	5,462	0	5,462	
Nebraska	20,000	0	20,000	
Texas	13,000	0	13,000	
Total interstate	64,099	221	64,320	

Table C-40. Toledo Port Area, 1983

Corn Receipts from Various Origins

	Mode of transportation			
Origin	Rail	Barge	Total	
	thousand	s of bushels		
Indiana	1,102	0	1,102	
Ohio	11,633	0	11,633	
Total interstate	12,735	0	12,735	











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