Assembling and Transporting Cotton to Domestic Mills and Ports by Southcentral and Southeastern Shippers

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PREFACE

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Assembling and Transporting Cotton to Domestic Mills and Ports by Southcentral and Southeastern Shippers

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Cotton is still a major source of income to farmers in many areas of the Southern United States. Cotton is not only important to the farmers who produce it, but also to the thousands of people who perform cotton-oriented services and processing activities and are dependent upon the product for employment.

Cotton is a renewable resource whereas synthetic fibers are produced mainly from non-renewable resources such as fossil fuels or petroleum products. In view of the increasing costs of fossil fuels it becomes increasingly important that a viable cotton industry be maintained as an alternative source of fiber. One way in which this may be accomplished is by reducing costs and inefficiencies in the cotton marketing system.

It is generally recognized widely in the cotton industry that the assembly[3] and transportation of cotton from widely scattered production areas to domestic mills and ports is a major problem in cotton marketing. This problem was documented in the report of the National Cotton Marketing Study Committee to the Secretary of Agriculture in 1975.[4] In order to identify areas of inefficiency and to determine means of improving the marketing system, specific data were collected on assembling and transporting cotton located at different points in the various producing regions by large and small cotton shippers.

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[3]Assembly refers to the activity associated with the grouping of cotton at shipping points for transporting to mills or export outlets.

[4]U.S. Department of Agriculture, National Cotton Marketing Study Committee Report, Washington, August, 1975.

The general purpose of the study was to provide information on the various methods used by shippers in assembling and transporting cotton to mills and ports. The specific objectives were:

A. To determine the volume and source of cotton handled by cotton shippers.

B. To determine the methods, problems, and charges associated with assembling cotton for shipment from assembly points to domestic mills or ports.

C. To obtain information on rates charged for moving cotton from assembly points to domestic mills or ports by alternative modes of transportation.

Scope and Method of Study

The primary data for this study were collected for the 1975-76 season. Data were obtained by representatives of the Agricultural Experiment Stations in Alabama, Arkansas, Mississippi, South Carolina, and Tennessee through personal interviews with 33 cotton shippers.[5] These shippers were reported by the USDA to handle 85 percent or more of the domestic cotton crop. They supplied information relating to the volume of cotton handled, region where it was purchased, location of the cotton at time of purchase, destination of the cotton, and mode of transportation used. In addition, information on the methods used, and the charges and problems encountered in assembling and transporting cotton to mills and ports was reported, as well as the advantages and disadvantages of the different methods of assembling and transporting cotton.

These data were supplemented with data from both published and unpublished sources. They were used to describe the methods, problems, and charges associated with assembling and transporting cotton located at different points in the various producing regions to domestic mills and ports.

LOCATION AND SIZE OF FIRMS

Location of Firms

Of the 33 shippers surveyed, 3 were located in Alabama, 6 in Arkansas, 2 in Georgia, 2 in Mississippi, 1 in North Carolina, 4 in South Carolina, and 15 in Tennessee (see cover). For purposes of this study, those firms in Alabama, Georgia, North Carolina, and South Carolina were referred to as Southeast (SE) shippers; 10 firms were located in those states. The remaining 23 firms, located in Arkansas, Mississippi, and Tennessee, were referred to as Southcentral (SC) shippers.

[5]Cotton shippers were defined as any individuals or firms that take title to cotton and arrange for its transportation to mills or ports.

Size of Firms

The 33 shippers interviewed handled 6,664,399 bales of cotton. This is equal to about 80 percent of the 8,271,000 bales of Upland cotton produced in the U.S. during 1975. Of the cotton handled by the 33 shippers, 5,822,104 bales or about 87 percent were shipped to mills and ports (Table 1). The remaining 842,295 bales had not been shipped at the time the study was made or were marketed by other means, such as F.O.B. warehouse. Practically all of this cotton was handled by the SC shippers. In the remainder of this report the data relate only to the 5,822,104 bales of cotton that had been shipped at the time of the study.

Table 1. Bales of Cotton Handled, by Size and Location of Firm, 33 Shippers, 1975-76 Marketing Season

Size of firm[1]	Southcentral shippers[2]		Southeast shippers[3]		All shippers	
	Firms	Bales	Firms	Bales	Firms	Bales
	Number		Number		Number	
Small	9	258,409	8	202,018	17	460,427
Medium	10	1,650,667	2	442,010	12	2,092,677
Large	4	3,269,000	0	--	4	3,269,000
All firms	23	5,178,076	10	644,028	33	5,822,104

[1]In this and all succeeding tables small firms refer to shippers who shipped less than 100,000 bales; medium-size firms shipped from 100,000 to 500,000 bales; and large firms shipped 500,000 or more bales per firm.

[2]Of the 23 Southcentral shippers, 15 were located in Tennessee, 6 in Arkansas, and 2 in Mississippi.

[3]Of the 10 Southeast shippers, 4 were located in South Carolina, 3 in Alabama, 2 in Georgia, and 1 in North Carolina.

The number of bales of cotton shipped per firm averaged 176,427 and ranged from less than 1,000 to more than one million. Seventeen of the firms shipped less than 100,000 bales, 12 shipped between 100,000 and 500,000 bales, and 4 shipped 500,000 or more bales; the firms were classified as small, medium, and large, respectively. The 4 large firms shipped 56 percent of the cotton and the 17 small firms shipped 8 percent.

Southcentral Shippers

The 23 SC shippers handled 5,178,076 bales or about 89 percent of the total volume shipped. The average number of bales shipped by these firms was 225,134, and ranged from 2,000 to more than 1,000,000 per firm. There were 9 small, 10 medium, and 4 large shippers in the SC region. The 4 large firms shipped 63 percent of the cotton handled by the SC firms, and the 9 small firms 5 percent.

Southeast Shippers

The 10 shippers interviewed in the SE region handled 644,028 bales or about 11 percent of total volume handled. The number of bales handled per

firm averaged 64,403 and ranged from less than 1,000 to 320,000. There were 8 small and 2 medium-size firms in the SE region; no large shippers were interviewed in that region. The 2 medium-size firms handled 69 percent of the cotton shipped, or more than twice the amount handled by the 8 small firms.

SOURCE OF COTTON

Location of Production

Four cotton-producing regions are generally recognized in the U.S. (see cover): 1) the Southeast (SE), which includes North Carolina, South Carolina, Georgia, Florida, and Alabama; 2) the Southcentral (SC), Missouri, Arkansas, Tennessee, Mississippi, and Louisiana; 3) the Southwest (SW), Texas and Oklahoma; and 4) the West (W), California, Arizona, and New Mexico. These states accounted for essentially all of the Upland cotton produced in the U.S. in 1975.[6] Of this cotton, 31.4 percent was produced in the SW, 30.9 percent in the W, 30.4 percent in the SC, and 7.3 percent in the SE.

Region of Purchase

Eight of the shippers interviewed purchased cotton in each of the four producing regions, 3 in three regions, 7 in two, and 15 in one. Almost half of the cotton purchased by the 33 shippers was purchased in the SC producing region (Table 2).[7] More than half of that purchased by the medium and small shippers and more than a third of that purchased by the large shippers were purchased in the SC region. The large and medium-size shippers purchased a larger proportion of their cotton in the SW and W regions than the small shippers purchased in those regions.

Southcentral Shippers

Almost half of the cotton handled by the 23 SC shippers was purchased in the SC region. Thirteen of these shippers purchased cotton in only one region, 5 purchased in each of the four regions, and most of the remaining firms purchased cotton in two regions. The largest percentage of the cotton handled by each size group (small, medium, and large) was purchased in the SC region.

Southeast Shippers

Almost half of the 664,028 bales of cotton handled by the 10 SE shippers was purchased in the SW region. Eight of these shippers purchased cotton in two or more regions, 3 purchased cotton in each of the four regions, and 2 purchased in only one region. Most of the cotton handled by the medium-size SE shippers was purchased in the SW, while most of that handled by the small shippers was purchased in the SE region.

[6]Supplement for 1976 to "Statistics on Cotton and Related Data, 1920-73," ERS, USDA, Stat. Bul. 535, April 1976.

[7]Because of carryover from previous seasons, the amount of cotton purchased in some regions exceeded the actual production for the year studied.

Table 2. Bales of Cotton Handled by 33 Shippers, by Location and Size of Firm and Region of Purchase, 1975-76 Marketing Season

Location and size of shipper	No. of shippers	Region of purchase[1] Southeast	Southcentral	Southwest	West	Total
All shippers						
Small	17	138,613	268,214	6,040	47,560	460,427
Medium	12	109,961	1,137,959	552,668	292,089	2,092,677
Large	4	411,250	1,167,750	913,500	776,500	3,269,900
Total	33	659,824	2,573,923	1,472,208	1,116,149	5,822,104
Southcentral						
Small	9	0	216,909	0	41,500	258,409
Medium	10	23,861	1,107,456	245,562	273,788	1,650,667
Large	4	411,250	1,167,750	913,500	776,500	3,269,000
Total	23	435,111	2,492,115	1,159,062	1,091,788	5,178,076
Southeast						
Small	8	138,613	51,305	6,040	6,060	202,018
Medium	2	86,100	30,503	307,106	18,301	442,010
Large	0	0	0	0	0	0
Total	10	224,713	81,808	313,146	24,361	644,028

[1]In this and all succeeding tables the Southeast region of purchase includes the states of Alabama, Florida, Georgia, North Carolina, and South Carolina; the Southcentral region includes the states of Arkansas, Louisiana, Mississippi, Missouri, and Tennessee; the Southwest region includes the states of Oklahoma and Texas; and the West region includes the states of Arizona, California, and New Mexico.

Point of Purchase

Ninety percent of the cotton handled by the shippers surveyed was located at warehouses and 10 percent at gins at the time the shipper assumed title to the cotton (Table 3). These purchases are referred to as 'warehouse' and 'gin point' purchases in the remainder of the report. The warehouses and gins usually were located within a few miles of the farm on which the cotton was grown. In each production region most of the cotton was purchased at warehouses. However, the location at which the cotton was purchased differed among the shippers surveyed (Appendix Table 1).

Southcentral Shippers

Twenty-two of the SC shippers purchased cotton at warehouses. Seven of these also purchased some cotton at gins. Only 1 SC shipper purchased cotton only at gins.

Warehouse.—Ninety percent or more of the cotton purchased in each producing region by the SC shippers was purchased at warehouses. More than three-fifths of the volume handled by the small and medium-size SC shippers and almost a third of that handled by the large shippers was purchased at warehouses in the SC-producing region (Appendix Table 1).

Table 3. Bales of Cotton Handled by 33 Shippers, by Location of Shipper, Place of Purchase, and Region of Purchase, 1975-76 Marketing Season

Location of shipper and place of purchase[1]	Region of purchase				Total
	Southeast	Southcentral	Southwest	West	
All shippers					
Warehouse	558,936	2,324,923	1,292,208	1,076,149	5,252,216
Gin	100,888	249,000	180,000	40,000	569,888
Total	659,824	2,573,923	1,472,208	1,116,149	5,822,104
Southcentral					
Warehouse	425,111	2,244,365	1,159,062	1,051,788	4,880,326
Gin	10,000	247,750	0	40,000	297,750
Total	435,111	2,492,115	1,159,062	1,091,788	5,178,076
Southeast					
Warehouse	133,825	80,558	133,146	24,361	371,890
Gin	90,888	1,250	180,000	0	272,138
Total	224,713	81,808	313,146	24,361	644,028

[1]Place of purchase, either warehouse or gin, refers to the location of the cotton at the time the shipper assumed title.

All of the cotton purchased by medium and large SC shippers in the SW and W producing regions was purchased at warehouses.

Gin Point.—Only about 6 percent of the cotton purchased by the SC shippers was purchased at gins. Eighty-three percent of this cotton was purchased in the SC producing region, mostly by the large shippers.

Southeast Shippers

All of the SE shippers purchased cotton at warehouses. Five of them also purchased some cotton at gins.

Warehouses.—Almost three-fifths of the cotton handled by the SE shippers was purchased at warehouses (Appendix Table 1). All of the cotton purchased in the W and most of that purchased in the SE and SC producing regions was purchased at warehouses. About two-fifths of that purchased in the SW region was purchased at warehouses. More than half of the cotton purchased at warehouses by the small and medium-size SE shippers was purchased in the SE and SW producing regions, respectively. No large SE shippers were included in the study.

Gin Point.—Forty-two percent of the cotton handled by the SE shippers was purchased at gins. Most of the cotton was purchased in the SW region. Because only one medium-size SE shipper purchased cotton at gins, data for the medium and small SE shippers were combined.

DESTINATION OF COTTON

The cotton shipped during the 1975-76 marketing season by the firms interviewed was transported to either domestic mills or ports. Of the 5,822,104 bales of cotton shipped, 3,779,942 bales or approximately 65 percent went to domestic mills and the remaining bales or 35 percent were shipped to ports (Table 4). During the same year, total domestic mill consumption accounted for 68 percent and exports for 32 percent of the total disappearance of Upland cotton in the U.S.[8]

Of the cotton shipped to domestic mills, 47 percent went to Group 201 mills,[9] 26 percent to Group 200 mills,[10] and 26 percent to Alabama and Georgia mills. The remaining 1 percent went to mills in Tennessee and other areas.

Approximately 36 percent of the export cotton was shipped to California ports, 31 percent to Texas Gulf ports, 14 percent to Louisiana-Mississippi-Alabama ports, and 19 percent to other ports mostly on the Pacific Coast.

Most of the cotton purchased by all shippers in the SE and SC regions went to domestic mills, while most of that purchased in the SW and W producing regions went to ports. The destination of the cotton shipped varied with the location of the cotton at the time it was purchased and the shippers surveyed.

Cotton Located at Warehouses

Of the 5,252,216 bales of cotton purchased at warehouses, approximately 62 percent was shipped to domestic mills and 38 percent to ports (Table 5).

Almost half of the cotton shipped from warehouses to domestic mills went to Group 201 mills, and almost two-fifths of the export cotton shipped from warehouses went to California ports. The shipments of the cotton purchased at warehouses varied among the firms surveyed.

Southcentral Shippers

Three-fifths of the 4,880,326 bales of cotton purchased at warehouses by SC shippers were shipped to domestic mills and the remainder was shipped to ports (Table 5). Fifty-five percent of that purchased by the large, 67 percent of that by the medium, and 98 percent of that purchased by the small SC shippers were shipped to domestic mills (Appendix Table 2).

Domestic Mills.—Of the cotton shipped from warehouses to domestic mills by SC firms, almost half was shipped to Group 201 mills. Approximately half of the remaining cotton was shipped to Group 200 mills and half to Alabama and Georgia mills.

Almost half of the cotton shipped from warehouses to domestic mills by the large and medium SC firms and three-fifths of that shipped by the small firms were shipped to Group 201 mills.

[8]Cotton and Wool Situation, ESCS, USDA, CWS-14, February, 1978.

[9]'Group 201 mills' is a trade term used to describe primary mill locations in the western half of North and South Carolina.

[10]'Group 200 mills' is a trade term used to describe primary mill locations in the eastern half of North and South Carolina.

Table 4. Destination of Cotton Shipped, by Region Purchased and Market Outlet, 33 Shippers, 1975-76 Marketing Season.

Market outlet	Region purchased				Total
	Southeast	Southcentral	Southwest	West	
			Number of bales		
Domestic mills					
200 Mills[1]	116,968	592,182	203,269	80,177	992,596
201 Mills[2]	235,424	1,179,447	188,283	175,409	1,778,563
Ala. Ga. Mills	294,017	421,416	208,617	51,770	975,820
Tennessee mills	326	17,400		5,327	23,053
Other		8,000	1,910		9,910
Total	646,735	2,218,445	602,079	312,683	3,779,942
Ports					
Texas Gulf ports		56,340	529,079	40,000	625,419
La. Miss. Ala. ports		296,888			296,888
California ports		2,250	27,000	701,766	731,016
Other[3]	13,089		314,050	61,700	388,839
Total	13,089	355,478	870,129	803,466	2,042,162
Grand total	659,824	2,573,923	1,472,208	1,116,149	5,822,104

[1]In this and all succeeding tables 'Group 200 mills' is a trade term used to describe the primary mill locations in the eastern half of North and South Carolina.

[2]In this and all succeeding tables 'Group 201 mills' is a trade term used to describe the primary mill locations in the western half of North and South Carolina.

[3]Included in the other cotton is 13,089 bales shipped to Atlantic ports. Most of the remaining cotton was shipped to ports in the states of Washington and Oregon on the West coast.

Table 5. Destination of Cotton Purchased at Warehouses by 32 Shippers[1], by Region of Purchase and Market Outlet, 1975-76 Marketing Season

Market outlet	Region of purchase				Total
	Southeast	Southcentral	Southwest	West	
			Number of bales		
			All 32 Shippers		
Domestic mills					
200 mills	80,968	536,558	95,269	80,177	792,972
201 mills	188,128	1,061,011	161,283	175,409	1,585,831
Ala., Ga.	276,425	370,514	163,617	51,770	862,326
Tenn.	326	17,400	0	5,327	23,053
Other	0	6,750	1,910	0	8,660
Total	545,847	1,992,233	422,079	312,683	3,272,842
Ports					
Texas Gulf	0	56,340	529,079	0	585,419
La.,Miss.,Ala.	0	274,100	0	0	274,100
Calif.	0	2,250	27,000	701,766	731,016
Other	13,089	0	314,050	61,700	388,839
Total	13,089	332,690	870,129	763,466	1,979,374
Grand total	558,936	2,324,923	1,292,208	1,076,149	5,252,216
			22 Southcentral Shippers		
Domestic mills					
200 mills	66,200	534,840	59,269	80,177	740,486
201 mills	115,201	1,010,067	140,809	164,627	1,430,704
Ala., Ga.	230,295	342,618	137,274	51,002	761,189
Tenn.	326	17,400	1,910	5,327	24,963
Other	0	6,750	0	0	6,750
Total	412,022	1,911,675	339,262	301,133	2,964,092
Ports					
Texas Gulf	0	56,340	478,750	0	535,090
La.,Miss.,Ala.	0	274,100	0	0	274,100
Calif.	0	2,250	27,000	688,955	718,205
Other	13,089	0	314,050	61,700	388,839
Total	13,089	332,690	819,800	750,655	1,916,234
Grand total	425,111	2,244,365	1,159,062	1,051,788	4,880,326
			10 Southeast Shippers		
Domestic mills					
200 mills	14,768	1,718	36,000	0	52,486
201 mills	72,927	50,944	20,474	10,782	155,127
Ala., Ga	46,130	27,896	26,343	768	101,137
Total	133,825	80,558	82,817	11,550	308,750
Ports					
Texas Gulf	0	0	50,329	0	50,329
Calif.	0	0	0	12,811	12,811
Total	0	0	50,329	12,811	63,140
Grand total	133,825	80,558	133,146	24,361	371,890

[1]One shipper did not purchase cotton at warehouses.

Ports.—The SC firms shipped 1,916,234 bales of cotton from warehouses to ports (Table 5). Of this cotton 37 percent was shipped to California ports, 28 percent to Texas Gulf ports, 14 percent to Louisiana-Mississippi-Alabama ports, and 21 percent to other ports.

Almost three-fourths of the total cotton shipped from warehouses to ports by the SC firms was shipped by the large firms (Appendix 2). The

largest percentage of this cotton was shipped to California ports. More than half of that shipped by the medium-size firms also was shipped to California ports. The small SC shippers exported only about 2 percent of the cotton they purchased at warehouses.

Southeast Shippers

Of the 371,890 bales of cotton purchased at warehouses by the SE shippers, 308,750 bales, or approximately 83 percent, were shipped to domestic mills. The remaining 63,140 bales were shipped to ports (Table 5).

Domestic Mills.—Of the cotton shipped from warehouses to domestic mills by the SE shippers, approximately 50 percent went to Group 201 mills. Most of the remaining cotton went to Alabama and Georgia mills.

The medium-size SE firms shipped 138,870 bales from warehouses to domestic mills. Of this cotton, about 35 percent was shipped to Group 201 mills, 35 percent to Group 200 mills, and the remaining 30 percent to Alabama-Georgia mills (Appendix Table 3). All of the 169,880 bales of cotton purchased at warehouses by the small SE firms were shipped to domestic mills. More than three-fifths of this cotton was shipped to Group 201 mills.

Ports.—Four-fifths of the cotton shipped from warehouses to ports by the SE shippers went to Texas Gulf ports and the remaining one-fifth went to California ports (Table 5). All of this cotton was handled by the medium-size shippers (Appendix Table 3).

Cotton Located at Gins

Of the 569,888 bales of cotton purchased at gins, approximately 89 percent was shipped to domestic mills and 11 percent to ports (Table 6). Most of the cotton shipped to domestic mills went to Group 200 and 201 mills. Most of that shipped for export went to Texas Gulf ports. The shipments of cotton purchased at gins varied among the shippers surveyed.

Southcentral Shippers

Of the 297,750 bales of cotton purchased at gin points by the SC shippers, approximately four-fifths or 234,962 bales were shipped to domestic mills (Table 6). The remaining one-fifth was shipped to ports.

Domestic Mills.—More than half of the cotton shipped from gins to domestic mills by the SC firms was shipped to Group 201 mills. Twenty-four percent of the total was shipped to Group 200 mills, 22 percent to Alabama-Georgia mills, and less than 1 percent to other mill areas (Table 6). Most of this cotton was shipped by the large SC firms (Appendix Table 4). The small SC firms shipped only 6,000 bales from gins to domestic mills, half of which went to Group 200 mills and half to group 201 mills.

Ports.—Of the cotton shipped from gins to ports by the SC shippers, approximately 64 percent went to Texas Gulf ports and 36 percent to Louisiana-Mississippi-Alabama ports (Table 6). All the cotton shipped from gins to ports by the large and medium-size SC firms was shipped to

Table 6. Destination of Cotton Purchased at Gins by 13 Shippers[1], by Region of Purchase and Market Outlet, 1975-76 Marketing Season

Market outlet	Region purchased: Southeast	Southcentral	Southwest	West	Total
			Number of bales		
			All 13 Shippers		
Domestic mills					
200 mills	36,000	55,624	108,000	0	199,624
201 mills	47,296	118,436	27,000	0	192,732
Ala., Ga.	17,592	50,902	45,000	0	113,494
Other	0	1,250	0	0	1,250
Total	100,888	226,212	180,000	0	507,100
Ports					
Texas Gulf	0	0	0	40,000	40,000
La.,Miss.,Ala.	0	22,788	0	0	22,788
Total	0	22,788	0	40,000	62,788
Grand total	100,888	249,000	180,000	40,000	569,888
			8 Southcentral Shippers		
Domestic mills					
200 mills	0	55,624	0	0	55,624
201 mills	10,000	117,242	0	0	127,242
Ala., Ga.	0	50,846	0	0	50,846
Tenn.	0	0	0	0	0
Other	0	1,250	0	0	1,250
Total	10,000	224,962	0	0	234,962
Ports					
Texas Gulf	0	0	0	40,000	40,000
La.,Miss.,Ala.	0	22,788	0	0	22,788
Total	0	22,788	0	40,000	62,788
Grand total	10,000	247,750	0	40,000	297,750
			5 Southeast Shippers		
Domestic mills					
200 mills	36,000	0	108,000	0	144,000
201 mills	37,296	0	27,000	0	64,296
Ala., Ga.	17,592	1,194	45,000	0	63,786
Other	0	56	0	0	56
Total	90,888	1,250	180,000	0	272,138
Ports					
Total	0	0	0	0	0
Grand total	90,888	1,250	180,000	0	272,138

[1]Twenty shippers did not purchase at gins.

Louisiana-Mississippi-Alabama ports (Appendix Table 4). All of that shipped by the small SC firms was shipped to the Texas Gulf ports.

Southeast Shippers

All of the 272,138 bales of cotton purchased at gins by the SE firms was shipped to domestic mills (Table 6). More than half of this cotton was shipped to Group 200 mills.

METHODS OF ASSEMBLING COTTON

The methods of assembling cotton purchased at warehouses for shipment to domestic mills and ports differed from those used for cotton purchased at gins.

Cotton Located at Warehouses

Usually cotton is moved from the gin to a warehouse where it is weighed, sampled, and compressed to a higher density for storage or shipment.[11] The warehouse issues a receipt for each bale, which establishes ownership and is used in marketing the cotton. Ownership of the cotton may change one or more times while it is stored in the warehouse.

Shippers tend to buy sufficient volumes of cotton to enable them to ship truck- or car-load lots of similar qualities (even-running lots) of cotton from each warehouse to specific mills or ports. Shippers attempt to avoid the extra expenses of shipping less than truck- or car-load lots and of consolidating cotton from several warehouses into a single warehouse for shipment. However, in some cases at the end of the season, individual shippers may have less than a full load of cotton left in one or more warehouses. When this happens the cotton is either carried over into the next season or that from two or more warehouses is combined to make a full load. By this procedure, long-distance hauling of partial loads of cotton is kept to a minimum.

In making preparation to ship a load of cotton the shippers prepare a list of the bales that make up the load. This list together with the appropriate warehouse receipts and detailed shipping instructions are sent to the operator of the warehouse. The shipping instructions relate to such things as compressing, bagging, mode of transportation, and destination of the cotton. The warehouse operator arranges for truck or railcar, as specified by the shipper, breaks the bales out of the stacks, prepares a bill of lading, performs other functions associated with the shipment as requested by the shipper, and loads the cotton. These procedures were basically the same for shipment of all cotton purchased at warehouses.

Cotton Purchased at Gins

The cotton purchased at gins usually was purchased from producers by forward contract. The cotton was shipped either direct or by way of a rented warehouse bay to mills or ports. The shippers interviewed reported the total

[11] Bales of cotton lint packaged at the gin have a density of about 12 pounds per cubic foot and weigh about 500 pounds gross weight. These bales are referred to as 'uncompressed' or 'gin bales'. At the warehouse, the bales of uncompressed cotton received from gins usually are compressed to a density of 22 pounds per cubic foot for storage and/or shipment to domestic mills. These bales are usually referred to as 'compressed' or 'standard density bales'. In addition, cotton that is to be shipped overseas is further compressed to 'high density', or about 33 pounds per cubic foot. In recent years the 'universal density bale' with a density of about 27 pounds per cubic foot has been accepted by shippers, transportation agencies, warehousemen, and mills. Compressing lint to this density at the gin could standardize the bale and eliminate the necessity of recompressing cotton at warehouses.

amount of cotton they purchased at gins (569,888 bales) but were unable to specify the amount shipped direct or the amount shipped by way of rented warehouse bays.

Direct Shipments

For cotton that was shipped direct from gins to mills or ports, several of the functions associated with warehousing cotton were eliminated. However, some of the functions associated with shipping cotton normally performed at the warehouses were done at the gin. Therefore, the cooperation of the ginner is necessary for direct gin to mill or port shipments. The ginner must agree to gin the cotton, to hold it on the gin yard, to notify the shipper when a load accumulates, to prepare a bill of lading, and to load the cotton for shipment. The shipper arranges for a truck or rail car to pick the cotton up at the gin and transport it to its destination. Because the shipper usually contracts for a producer's entire crop and ships the cotton as it is ginned, he is unable to sort the cotton into even-running lots for shipment. Therefore, he has to rely on his knowledge of the quality of the cotton produced in the gin area and of changes in the weather or crop conditions that may affect the lint quality. Drastic changes in quality of the cotton from anticipated quality are a major risk with the direct method of marketing cotton.

Warehouse Bay

A practice followed by two of the shippers was to rent space in a warehouse in which cotton purchased at gins could be held for a short time. The warehouse received the cotton from the gin and moved it directly into the space rented to the shipper. This practice allows the shipper to sort the cotton into even-running lots and to avoid the usual warehouse charges for receiving and storing cotton.

However, because the practice is relatively new, detailed information regarding the volume of cotton shipped through warehouse bays, and the services performed by the ginner, shipper, and warehouseman relative to this cotton, could not be ascertained.

MODE OF TRANSPORTATION

Of the 5,822,104 bales of cotton shipped from gins and warehouses to domestic mills and ports, approximately 62 percent were shipped by truck and 38 percent by rail (Table 7). Most of the cotton shipped from each producing region except the SW was transported by truck. In the SW region most of the cotton was moved by rail. The proportion of the cotton shipped by each method varied with its location at the time of purchase, the firms surveyed, and the destination of the cotton.

Table 7. Method of Transporting Cotton, by Region Purchased and Market Outlet, 33 Shippers, 1975-76 Marketing Season

Market outlet	Region of purchase and mode of transportation									
	Southeast		Southcentral		Southwest		West		Total	
	Truck	Rail	Truck	Rail	Truck	Rail	Truck	Rail	Truck	Rail
	Number of bales									
Domestic mills										
200 mills	104,817	12,151	342,912	249,270	157,766	45,503	1,470	78,707	606,965	385,631
201 mills	207,974	27,450	714,511	463,742	58,669	129,614	1,470	173,939	982,624	794,745
Ala.-Ca. mills	200,888	93,129	298,883	123,671	80,053	128,564	735	51,035	580,559	396,399
Tennessee mills	0	326	17,806	900	0	1,910	0	5,327	17,806	8,463
Other	0	0	6,750	0	0	0	0	0	6,750	0
Total	513,679	133,056	1,380,862	837,583	296,488	305,591	3,675	309,008	2,194,704	1,585,238
Ports										
Texas Gulf ports	0	0	19,925	36,415	161,670	367,409	40,000	0	221,595	403,824
La., Miss., Ala. ports	0	0	285,968	10,920	0	0	0	0	285,968	10,920
California ports	0	0	1,800	450	19,800	7,200	604,744	97,022	626,344	104,672
Other	0	13,089	0	0	197,525	116,525	60,842	858	258,367	130,472
Total	0	13,089	307,693	47,785	378,995	491,134	705,586	97,880	1,392,274	649,888
Grand total	513,679	146,145	1,688,555	885,368	675,483	796,725	709,261	406,888	3,586,978	2,235,126

Cotton Located at Warehouses

Of the 5,252,216 bales of cotton purchased at warehouses, 58 percent was shipped to domestic mills and ports by trucks (Table 8). More than half of the cotton shipped from warehouses to domestic mills and two-thirds of that shipped to ports went by trucks.

Southcentral Shippers

The SC firms purchased 4,880,326 bales of cotton at warehouses and shipped them to domestic mills and ports. Almost three-fifths of this cotton was shipped by truck and the remainder was shipped by rail (Table 8).

Domestic Mills.—Three-fifths of the cotton purchased at warehouses by the SC shippers was shipped to domestic mills; 51 percent of this cotton was shipped by truck. Most of the cotton shipped by the large SC firms was shipped by rail, while most of that shipped by the medium and small firms was shipped by truck (Appendix Table 5).

Ports.—Two-fifths of the cotton purchased at warehouses by the SC shippers was shipped to ports; approximately two-thirds of this cotton was shipped by truck and the remainder by rail. The large and medium-size SC shippers moved most of their cotton from warehouses to ports by trucks, while the small SC shippers shipped equal amounts by truck and by rail.

Southeast Shippers

Of the 371,890 bales of cotton purchased at warehouses by SE shippers, 258,312 bales or approximately 69 percent was shipped to domestic mills and ports by trucks, and the remaining cotton was shipped by rail (Table 8).

Domestic Mills.—More than four-fifths of the cotton purchased at warehouses by the SE shippers were shipped to domestic mills; 72 percent of this cotton was shipped by truck. Both the medium and small SE shippers used trucks to transport most of their cotton from warehouses to mills (Appendix Table 6).

Ports.—Seventeen percent of the cotton purchased at warehouses by the SE shippers was shipped to ports; 57 percent of this was shipped by truck and the remainder by rail. All of the cotton shipped from warehouses to ports by the SE shippers was shipped by medium-size shippers.

Table 8. Method of Transporting Cotton Purchased at Warehouses by 32 Shippers[1], by Region of Purchase and Market Outlet, 1975-76 Marketing Season

Market outlet	Region of purchase and mode of transportation									
	Southeast		Southcentral		Southwest		West		Total	
	Truck	Rail	Truck	Rail	Truck	Rail	Truck	Rail	Truck	Rail
	Number of bales									
	All 32 Shippers									
Domestic mills										
200 mills	68,817	12,151	303,025	233,533	49,766	45,503	1,470	78,707	423,078	369,894
201 mills	160,678	27,450	629,631	431,380	31,669	129,614	1,470	173,939	823,448	762,383
Ala., Ga.	183,296	93,129	253,968	116,546	35,053	128,564	735	51,035	473,052	389,274
Tenn.	0	326	16,500	900	0	1,910	0	5,327	16,500	8,463
Other	0	0	6,750	0	0	0	0	0	6,750	0
Total	412,791	133,056	1,209,874	782,359	116,488	305,591	3,675	309,008	1,742,828	1,530,014
Ports										
Texas Gulf	0	0	19,925	36,415	161,670	367,409	0	0	181,595	403,824
La., Miss., Ala.	0	0	263,180	10,920	0	0	0	0	263,180	10,920
Calif.	0	0	1,800	450	19,800	7,200	604,744	97,022	626,344	104,672
Other	0	13,089	0	0	197,525	116,525	60,842	858	258,367	130,472
Total	0	13,089	284,905	47,785	378,995	491,134	665,586	97,880	1,329,486	649,888
Grand total	412,791	146,145	1,494,779	830,114	495,483	796,725	669,261	406,888	3,072,314	2,179,902
	22 Southcentral Shippers									
Domestic mills										
200 mills	54,049	12,151	301,307	233,533	13,766	45,503	1,470	78,707	370,592	369,894
201 mills	100,600	14,601	607,867	402,200	21,920	118,889	1,470	163,157	731,857	698,847
Ala., Ga.	142,350	87,945	233,951	108,667	18,079	119,195	735	50,267	395,115	366,074
Tenn.	0	326	16,500	900	0	1,910	0	5,327	16,500	8,463
Other	0	0	6,750	0	0	0	0	0	6,750	0
Total	296,999	115,023	1,166,375	745,300	53,765	285,497	3,675	297,458	1,520,814	1,443,278
Ports										
Texas Gulf	0	0	19,925	36,415	138,183	340,567	0	0	158,108	376,982
La., Miss., Ala.	0	0	263,180	10,920	0	0	0	0	263,180	10,920
Calif.	0	0	1,800	450	19,800	7,200	591,933	97,022	613,533	104,672
Other	0	13,089	0	0	197,525	116,525	60,842	858	258,367	130,472
Total	0	13,089	284,905	47,785	355,508	464,292	652,775	97,880	1,293,188	623,046
Grand total	296,999	128,112	1,451,280	793,085	409,273	749,789	656,450	395,338	2,814,002	2,066,324
	10 Southeast Shippers									
Domestic mills										
200 mills	14,768	0	1,718	0	36,000	0	0	0	52,486	0
201 mills	60,078	12,849	21,764	29,180	9,749	10,725	0	10,782	91,591	63,536
Ala., Ga.	40,946	5,184	20,017	7,879	16,974	9,369	0	768	77,937	23,200
Total	115,792	18,033	43,499	37,059	62,723	20,094	0	11,550	222,014	86,736
Ports										
Texas Gulf	0	0	0	0	23,487	26,842	0	0	23,487	26,842
Calif.	0	0	0	0	0	0	12,811	0	12,811	0
Total	0	0	0	0	23,487	26,842	12,811	0	36,298	26,842
Grand total	115,792	18,033	43,499	37,059	86,210	46,936	12,811	11,550	258,312	113,578

[1]One shipper did not purchase cotton at warehouses.

Table 9. Method of Transporting Cotton Purchased at Gins by 13 Shippers[1], by Region of Purchase and Market Outlet, 1975-76 Marketing Season

	Region of purchase									
	Southeast		Southcentral		Southwest		West		Total	
Market outlet	Truck	Rail	Truck	Rail	Truck	Rail	Truck	Rail	Truck	Rail
					Number of bales					
					All 13 Shippers					
Domestic mills										
200 mills	36,000	0	39,887	15,737	108,000	0	0	0	183,887	15,737
201 mills	47,296	0	84,880	32,362	27,000	0	0	0	159,176	32,362
Ala., Ga.	17,592	0	44,915	7,125	25,000	0	0	0	107,507	7,125
Tenn.	0	0	1,306	0	0	0	0	0	1,306	0
Total	100,888	0	170,988	55,224	180,000	0	0	0	451,876	55,224
Ports										
Texas Gulf	0	0	0	0	0	0	40,000	0	40,000	0
La., Miss., Ala.	0	0	22,788	0	0	0	0	0	22,788	0
Total	0	0	22,788	0	0	0	40,000	0	62,788	0
Grand total	100,888	0	193,776	55,224	180,000	0	40,000	0	514,664	55,224
					8 Southcentral Shippers					
Domestic mills										
200 mills	0	0	39,887	15,737	0	0	0	0	39,887	15,737
201 mills	10,000	0	84,880	32,362	0	0	0	0	94,880	32,362
Ala., Ga.	0	0	43,721	7,125	0	0	0	0	43,721	7,125
Other	0	0	1,250	0	0	0	0	0	1,250	0
Total	10,000	0	169,738	55,224	0	0	0	0	179,738	55,224
Ports										
Texas Gulf	0	0	0	0	0	0	40,000	0	40,000	0
La., Miss., Ala.	0	0	22,788	0	0	0	0	0	22,788	0
Total	0	0	22,788	0	0	0	40,000	0	62,788	0
Grand total	10,000	0	192,526	55,224	0	0	40,000	0	242,526	55,224
					5 Southeast Shippers					
Domestic mills										
200 mills	36,000	0	0	0	108,000	0	0	0	144,000	0
201 mills	37,296	0	0	0	27,000	0	0	0	64,296	0
Ala., Ga.	17,592	0	1,194	0	45,000	0	0	0	63,786	0
Tenn.	0	0	0	0	0	0	0	0	0	0
Other	0	0	56	0	0	0	0	0	56	0
Total	90,888	0	1,250	0	180,000	0	0	0	272,138	0
Ports										
Total	0	0	0	0	0	0	0	0	0	0
Grand total	90,888	0	1,250	0	180,000	0	0	0	272,138	0

[1]Twenty shippers did not purchase at gins.

Cotton Located at Gins

Of the 569,888 bales of cotton purchased at gins, 507,100 bales were shipped to domestic mills and 62,788 bales were shipped to ports (Table 9). Eighty-nine percent of the cotton shipped to domestic mills and all of that shipped to ports was shipped by truck.

Southcentral Shippers

Of the 297,750 bales of cotton purchased at gins and shipped to domestic mills and ports by the SC firms, 81 percent was shipped by truck and the remainder was shipped by rail (Table 9).

Domestic Mills.—Of the cotton purchased at gins by SC shippers, 234,962 bales or about four-fifths was shipped to domestic mills; three-fourths of this cotton was shipped by truck and the remainder by rail. Ninety-two percent of the cotton shipped from gins to domestic mills by the medium-size shippers, 73 percent of that shipped by the large shippers, and 50 percent of that shipped by the small shippers was shipped by truck (Appendix Table 7).

Ports.—The SC firms shipped 62,788 bales of cotton from gins to ports (Table 9), all of which was transported by truck. Almost two-thirds of the cotton was shipped by the small shippers, one-fourth by the medium-size shippers, and about one-tenth by the large shippers.

Southeast Shippers

The SE shippers purchased 272,138 bales of cotton at gins, all of which was shipped to domestic mills by truck (Table 9). Because only one medium-size SE shipper purchased cotton at gins, the data for the medium and small SE shippers were combined.

ASSEMBLING AND TRANSPORTATION COSTS

The costs associated with assembling and transporting cotton from gins and warehouses to mills and ports are discussed in this chapter.

Assembling Cotton

Shippers tend to buy cotton at gins and/or warehouses in sufficient quantities to permit them to ship truck- or car-load lots from an individual gin or warehouse. They try not to have a partial load of cotton left at a gin or warehouse at the end of the season. However, when partial loads are encountered, the cotton may be: 1) consolidated, usually by truck, from two or more points and shipped in car- or truck-load lots; 2) sold to other buyers; or 3) carried over into the next season. The additional charges reported for consolidating a load of cotton from two or more gins or warehouses for shipment to mills or ports was $0.50 per bale.

The cost items associated with cotton shipped from warehouses were: buying and selling commission, receiving, weighing, sampling, storage, compression, insurance, financing, overhead, and miscellaneous expenses.

Those items usually encountered for cotton shipped from gins were: buying and selling commission, compression (in some instances), financing, overhead, and miscellaneous expenses. The costs of performing these functions have been reported by the USDA and were not considered as part of this study. The latest USDA report covers these costs for the 1974-75 marketing season.[12] Based on these data the average cost in the SC region for shipping compressed cotton from gins to domestic mills was $4.97 per bale less than shipping similar cotton from a warehouse. Storage and other charges incurred on cotton in warehouses account for this difference in costs.

Transportation

Cotton was transported from warehouses and gins by truck and by rail. Charges for transporting cotton were the same for similar-type cotton located at warehouses or gins. The standard truck load is 80 bales, and the standard rail-car load is 100 bales of cotton compressed to standard density. Both truck and rail transportation charges vary with the number of bales and the distance hauled, higher charges being imposed on less than truck- or car-load lots of cotton. In addition, extra charges were made for moving cotton that was recompressed in transit, and for delays in loading and unloading. Uncompressed cotton is more expensive to transport than compressed cotton because: 1) it takes longer to load at the gin, 2) it is dangerous to haul because of the size of the bale, 3) fewer bales can be hauled per load, and 4) there is greater possibility of fire with a newly ginned uncompressed bale.

Truck and rail charges were compared for cotton compressed to standard density and shipped from selected points in Arkansas, Louisiana, and Mississippi to selected domestic mill areas (Table 10). The average truck and rail charges for these selected points were $6.03 and $7.55 per bale, respectively. This difference in transportation charges probably is a major reason why more cotton is transported by truck than rail.

Truck rates for handling cotton are competitive and depend on such things as the time of year, amount of available cotton, and type of bales hauled. For example, the harvest seasons for cotton and several other farm commodities correspond. This creates increased demand for all types of transportation facilities during that period. Because truck charges are not regulated, the rates charged may vary considerably.

The rail rate structure is determined by the Interstate Commerce Commission and is not as competitive as truck rates.

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[12] Whitman M. Chandler and Edward H. Glade, Jr., "Cost of Merchandising U.S. Cotton, 1974-75 Season," ERS, USDA, ERS-640, July, 1976.

Table 10. Selected Point-to-Point Truck and Rail Transportation Charges[1] per Bale, from Nine Points in Arkansas, Louisiana, and Mississippi, 1975-76 Marketing Season

Origin	Destination											
	Cedartown GA.		Carolina Group A-200		Carolina Group B-201		Thomaston and Macon, Ga.		Sylacauga, Ala.		Augusta, GA.	
	Truck[2]	Rail[3]	Truck	Rail	Truck	Rail	Truck	Rail	Truck	Rail	Truck	Rail
	Dollars per bale											
Arkansas												
Blytheville	4.75	6.55	7.25	8.05	6.44	7.65	5.00	6.70	4.50	6.15	5.75	7.00
McGehee	5.00	6.80	7.50	8.70	6.69	7.75	5.25	6.95	4.75	6.65	6.00	7.45
Pine Bluff	5.00	6.95	7.50	8.70	6.69	7.75	5.25	7.40	4.75	6.70	6.00	7.70
Louisiana												
Alexandria	5.75	7.85	8.25	9.65	7.44	8.90	6.00	8.05	5.50	7.65	6.75	8.70
Bernice	5.75	7.70	8.25	9.65	7.44	8.90	6.00	8.00	5.50	7.45	6.75	8.55
Shreveport	5.75	7.85	8.25	9.65	7.44	8.90	6.00	8.05	5.50	7.65	6.75	8.70
Mississippi												
Clarksdale	4.75	6.30	7.25	8.00	6.44	7.45	5.00	6.70	4.50	6.05	5.75	6.95
Cleveland	4.75	6.30	7.25	8.00	6.44	7.45	5.00	6.70	4.50	6.05	5.75	6.95
Greenville	5.00	6.30	7.50	8.00	6.69	7.45	5.25	6.70	4.75	6.05	6.00	6.95
Average	5.17	6.93	7.67	8.71	6.86	8.02	5.42	7.25	4.92	6.71	6.17	7.66

[1]The rates were computed for cotton compressed to standard density.

[2]These rates were furnished by a truck brokerage firm.

[3]These rates were furnished by a railroad company on a 100-pound basis and converted to a per bale basis.

PROBLEMS ENCOUNTERED IN ASSEMBLING AND TRANSPORTING COTTON

All shippers face some problems in assembling and transporting cotton to mills and ports. Because cotton is a seasonal crop, pressure is placed on all phases of the industry during the months of September, October, and November when harvest operations are in full swing.

Cotton Located at Warehouses

The SC and SE shippers faced the same basic problems in the four producing regions with cotton purchased at warehouses and shipped to mills or ports. The problems encountered did not differ by destination but rather by the mode of transport used.

Truck

The problem reported most often by shippers was that of not being able to get cotton out of warehouses during the rushed harvest season. The shippers also were confronted with being penalized by truckers having to make more than one stop per load. Other problems listed were: domestic mills refused to unload cotton on weekends; truckers forgot to pick up part of a shipment; inconsistent use of bagging material in the cotton industry; a shortage of trucks during the harvest season; the available trucks frequently needed repairing; difficulty in getting enough cotton for even-running-loads in some areas; some mills would not accept uncompressed bales; and warehouses stored cotton by the crop year rather than by quality.

Rail

Shippers also faced several problems when shipping cotton by rail from warehouses to domestic mills and ports. The problem reported most frequently was that boxcars were in short supply and many of those that were available were not clean. Shippers also were confronted with congestion at warehouses during harvest, and the fact that rail shipments tended to be slower than truck, increasing the shipper's cost because his capital was tied up for a longer period. There also were problems in assembling the cotton into even-running lots because the cotton was stored by crop year rather than by quality. Too, it was reported that cotton was sometimes lost at warehouses or while in transit to mills or ports.

Recommended Solutions

The shippers suggested the following solutions to problems they faced with cotton purchased at warehouses. 1) Select a dependable truck brokerage firm, 2) exercise care when buying cotton stored in warehouses that are generally known for poor service, 3) encourage producers not to store their cotton in unreliable warehouses, and 4) when dealing with problems, whether at mills, warehouses, or with trucking firms, contact the people who can get the problem corrected. Several shippers indicated that in many instances too much time was wasted dealing with people who did not understand the shipper's problem.

Cotton Located at Gins

The SC and SE shippers encountered the same basic problems with cotton purchased at gins. The main differences were found in the modes of transportation used to move the cotton to mills and ports.

Truck

The main problem reported by shippers who purchased cotton at gins and shipped it by truck to domestic mills and ports was a shortage of trucks available for hauling cotton during the harvest season. Other problems included gin delays, and that truckers did not want or were unwilling to assemble small lots of cotton. Some mills would not accept uncompressed bales. Too, a lack of uniformity in cotton quality made it difficult to assemble even-running lots.

Rail

Several problems were encountered with cotton purchased at gins and shipped by rail. They included a short supply of boxcars; many of the available boxcars were unclean when they arrived and either had to be exchanged or cleaned; increasing freight rates; wet cotton; a lack of uniformity in cotton quality; and cotton needed pressing to a higher density at gins.

Recommended Solutions

The shippers suggested the following solutions to problems they faced with cotton purchased at gins: 1) cover bales stored on gin yards with tarps; 2) use universal density (UD) gin presses so that more cotton can be stored and loaded at gin yards; and 3) retain services of a reliable truck brokerage firm.

SUMMARY AND CONCLUSIONS

The objective of this study was to provide information on the various methods used by shippers in assembling and transporting cotton to domestic mills and ports.

Representatives of five State Agricultural Experiment Stations (Alabama, Arkansas, Mississippi, South Carolina, and Tennessee) personally interviewed 33 cotton shippers to obtain primary data on assembling and transporting cotton to mills and ports.

Of the firms interviewed 23 were located in the SC and 10 in the SE region. These shippers shipped a total of 5,822,104 bales of cotton to mills and ports during the 1975-76 marketing season. The 23 SC shippers handled 89 percent of the total volume shipped, while SE shippers accounted for the remaining 11 percent.

The shippers were stratified into size groups according to the number of bales of cotton handled. The small firms shipped less than 100,000 bales, medium-size firms shipped from 100,000 bales to 500,000 bales, and large firms shipped 500,000 or more bales per firm. There were 17 small, 12 medium, and 4 large shippers. The large shippers purchased most of their cotton in the SC and SW producing regions, while the medium and small shippers purchased the most of their cotton in the SC producing region.

Ninety percent of the cotton handled by all shippers was purchased at warehouses and 10 percent at gins. Thirty-two of the shippers purchased some cotton at warehouses, and 12 purchased some cotton at gins. One shipper purchased cotton only at gins.

The major domestic mill areas to which cotton was shipped were Group 200 mills, Group 201 mills, Alabama and Georgia mills, and Tennessee mills. The chief ports were Texas Gulf, Louisiana-Mississippi-Alabama, and California ports. Of the total cotton shipped, 65 percent went to domestic mills and 35 percent to ports. The largest percentage of cotton shipped to domestic mills was shipped to the Group 201 mills, and the largest percentage of cotton shipped to ports went to California ports.

Three methods were used to assemble cotton for shipment: 1) the traditional method of assembling cotton at warehouses, 2) assembling cotton at gins and shipping it direct to mills or ports, and 3) assembling cotton in rented warehouses bays and then shipping it to mills or ports. Cotton assembled at warehouses accounted for 89 percent of the total cotton shipped. This cotton was transported to domestic mills and ports by both truck and rail.

The cost items associated with cotton shipped from warehouses were: buying and selling commission, receiving, weighing, sampling, storage, compressing, insurance, financing, overhead, and miscellaneous expenses. For cotton shipped from gins, they were: buying and selling commission, compressing (in some instances), financing, overhead, and miscellaneous expenses.

In the SC region it cost $4.97 per bale less to ship compressed cotton from gins to domestic mills than from warehouses to domestic mills. Both truck and rail charges varied with the number of bales hauled per load and the distance hauled. Truck rates are negotiated, while rail rates are regulated by the Interstate Commerce Commission. Truck rates were lower than rail rates, which is probably the major reason why more cotton is transported by truck than by rail.

The major problems reported by the shippers were a shortage of transportation facilities and not being able to get cotton out of warehouses during the rushed harvest season. To make sure transportation facilities are available, shippers may have to acquire their own or enter into contracts with transportation firms for their services. The inability to get cotton out of the warehouse when it is needed can create a difficult situation for shippers who are trying to fill their orders on time.

Appendix Table 1. Bales of Cotton Purchased by Southcentral and Southeast Shippers at Gins and Warehouses, by Area, Size of Firm, and Region of Purchase, 1975-76 Marketing Season

Location of cotton and size of firm	Region of purchase				
	Southeast	Southcentral	Southwest	West	Total
		Number of bales			
		23 Southcentral Shippers			
Gins					
Small	0	6,000	0	40,000	46,000
Medium	0	72,250	0	0	72,250
Large	10,000	169,500	0	0	179,500
Total	10,000	247,750	0	40,000	297,750
Warehouse					
Small	0	210,909	0	1,500	212,409
Medium	23,861	1,035,206	245,562	273,788	1,578,417
Large	401,250	998,250	913,500	776,500	3,089,500
Total	425,111	2,244,365	1,159,062	1,051,788	4,880,326
Gins and warehouse					
Small	0	216,909	0	41,500	258,409
Medium	23,861	1,107,456	245,562	273,788	1,650,667
Large	411,250	1,167,750	913,500	776,500	3,269,000
Total	435,111	2,492,115	1,159,062	1,091,788	5,178,076
		10 Southeast Shippers[1]			
Gins					
Medium and small	90,888	1,250	180,000	0	272,138
Warehouse					
Small	107,725	50,055	6,040	6,060	169,880
Medium	26,100	30,503	127,106	18,301	202,010
Total	133,825	80,558	133,146	24,361	371,890
Gins and warehouse					
Small	138,613	51,305	6,040	6,060	202,018
Medium	86,100	30,503	307,106	18,301	442,010
Total	224,713	81,808	313,146	24,361	644,028

[1]There were no large Southeast shippers. The data for small and medium size shippers at gin point were combined because only one medium-sized shipper purchased cotton at gin point.

Appendix Table 2. Destination of Cotton Purchased by Southcentral Shippers at Warehouses, by Size of Shipper, Region of Purchase, and Market Outlet, 1975-76 Marketing Season

Market outlet	Region of purchase				
	Southeast	Southcentral	Southwest	West	Total
		Number of bales			
		4 Large Shippers			
Domestic mills					
200 mills	62,406	178,142	30,410	66,450	337,408
201 mills	111,406	453,098	78,950	150,900	794,354
Ala. Ga.	227,438	172,097	123,790	46,275	569,600
Tenn.	0	0	0	3,750	3,750
Total	401,250	803,337	233,150	267,375	1,705,112
Ports					
Texas Gulf	0	18,125	366,300	0	384,425
La. Miss, Ala.	0	176,788	0	0	176,788
Calif.	0	0	0	447,425	447,425
Other	0	0	314,050	61,700	375,750
Total	0	194,913	680,350	509,125	1,384,388
Grand total	401,250	998,250	913,500	776,500	3,089,500
		10 Medium-size Shippers			
Domestic mills					
200 mills	3,794	295,660	28,859	13,727	342,040
201 mills	3,795	431,272	61,859	13,727	510,653
Ala., Ga.	2,857	149,947	13,484	4,727	171,015
Tenn.	326	17,400	1,910	1,577	21,213
Other	0	6,750	0	0	6,750
Total	10,772	901,029	106,112	33,758	1,051,671
Ports					
Texas Gulf	0	38,215	112,450	0	150,665
La., Miss., Ala.	0	93,712	0	0	93,712
Calif.	0	2,250	27,000	240,030	269,280
Other	13,089	0	0	0	13,089
Total	13,089	134,177	139,450	240,030	526,746
Grand total	23,861	1,035,206	245,562	273,788	1,578,417
		8 Small Shippers			
Domestic mills					
200 mills	0	61,038	0	0	61,038
201 mills	0	125,697	0	0	125,697
Ala., Ga.	0	20,574	0	0	20,574
Total	0	207,309	0	0	207,309
Ports					
La., Miss., Ala.	0	3,600	0	0	3,600
Calif.	0	0	0	1,500	1,500
Total	0	3,600	0	1,500	5,100
Grand total	0	210,909	0	1,500	212,409

Appendix Table 3. Destination of Cotton Purchased by Southeast Shippers at Warehouses, by Size of Shipper, Region of Purchase, and Market Outlet, 1975-76 Marketing Season

Market outlet	Region purchased: Southeast	Southcentral	Southwest	West	Total
			Number of bales		
			2 Medium-Sized Shippers		
Domestic mills					
200 mills	12,000	0	36,000	0	48,000
201 mills	6,965	19,827	16,382	5,490	48,664
Ala., Ga.	7,135	10,676	24,395	0	42,206
Total	26,100	30,503	76,777	5,490	138,870
Ports					
Texas Gulf	0	0	50,329	0	50,329
Calif.	0	0	0	12,811	12,811
Total	0	0	50,329	12,811	63,140
Grand total	26,100	30,503	127,106	18,301	202,010
			8 Small Shippers		
Domestic mills					
200 mills	2,768	1,718	0	0	4,486
201 mills	65,962	31,117	4,092	5,292	106,463
Ala., Ga.	38,995	17,220	1,948	768	58,931
Total	107,725	50,055	6,040	6,060	169,880
Ports					
Total	0	0	0	0	0
Grand total	107,725	50,055	6,040	6,060	169,880

Appendix Table 4. Destination of Cotton Purchased by Southcentral Shippers at Gins, by Size of Shipper, Region of Purchase, and Market Outlet, 1975-76 Marketing Season

Market outlet	Region of purchase: Southeast	Southcentral	Southwest	West	Total
			Number of bales		
			4 Large Shippers		
Domestic mills					
200 mills	0	32,337	0	0	32,337
201 mills	10,000	80,067	0	0	90,067
Ala., Ga. mills	0	49,596	0	0	49,596
Tenn. mills	0	0	0	0	0
Other	0	1,250	0	0	1,250
Total	10,000	163,250	0	0	173,250
Ports					
La., Miss., Ala.	0	6,250	0	0	6,250
Total	0	6,250	0	0	6,250
Grand total	10,000	169,250	0	0	179,500
			2 Medium-Sized Shippers		
Domestic mills					
200 mills	0	20,287	0	0	20,287
201 mills	0	34,175	0	0	34,175
Ala., Ga. mills	0	1,250	0	0	1,250
Total	0	55,712	0	0	55,712
Ports					
La., Miss., Ala.	0	16,538	0	0	16,538
Grand total	0	72,250	0	0	72,250
			2 Small Shippers		
Domestic mills					
200 mills	0	3,000	0	0	3,000
201 mills	0	3,000	0	0	3,000
Total	0	6,000	0	0	6,000
Ports					
Texas Gulf	0	0	0	40,000	40,000
Grand total	0	6,000	0	40,000	46,000

Appendix Table 5. Method of Transporting Cotton Purchased by Southcentral Shippers at Warehouses, by Size of Shipper, Region of Purchase, and Market Outlet, 1975-76 Marketing Season

Market outlet	Region of purchase and mode of transportation: Southeast Truck	Southeast Rail	Southcentral Truck	Southcentral Rail	Southwest Truck	Southwest Rail	West Truck	West Rail	Total Truck	Total Rail
					Number of bales					
					4 Large Shippers					
Domestic mills										
200 mills	51,237	11,169	81,935	96,207	3,041	27,369	1,470	64,980	137,683	199,725
201 mills	97,787	13,619	210,963	242,135	7,895	71,055	1,470	149,430	318,115	476,239
Ala., Ga.	140,475	86,963	109,639	62,458	12,379	111,411	735	45,540	263,228	306,372
Tenn.	0	0	0	0	0	0	0	3,750	0	3,750
Total	289,499	111,751	402,537	400,800	23,315	209,835	3,675	263,700	719,026	986,086
Ports										
Texas Gulf	0	0	18,125	0	111,183	255,117	0	0	129,308	255,117
La., Miss., Ala.	0	0	174,268	2,520	0	0	0	0	174,268	2,520
California	0	0	0	0	0	0	431,133	16,292	431,133	16,292
Other	0	0	0	0	197,525	116,525	60,842	858	258,367	117,383
Total	0	0	192,393	2,520	308,708	371,642	491,975	17,150	993,076	391,312
Grand total	289,499	111,751	594,930	403,320	332,023	581,477	495,650	280,850	1,712,102	1,377,398

Continued

Appendix Table 5. Continued

Market outlet	Region of purchase and mode of transportation								Total	
	Southeast		Southcentral		Southwest		West			
	Truck	Rail	Truck	Rail	Truck	Rail	Truck	Rail	Truck	Rail
					Number of bales					
					10 Medium-Sized Shippers					
Domestic mills										
200 mills	2,812	982	175,060	120,600	10,725	18,134	0	13,727	188,597	153,443
201 mills	2,813	982	295,682	135,590	14,025	47,834	0	13,727	312,520	198,133
Ala., Ga.	1,875	982	106,218	43,729	5,700	7,784	0	4,727	113,793	57,522
Tenn.	0	326	16,500	900	0	1,910	0	1,577	16,500	4,713
Other	0	0	6,750	0	0	0	0	0	6,750	0
Total	7,500	3,272	600,210	300,819	30,450	75,662	-	33,758	638,160	413,511
Ports										
Texas Gulf	0	0	1,800	36,415	27,000	85,450	0	0	28,800	121,865
La., Miss., Ala.	0	0	86,362	7,350	0	0	0	0	86,362	7,350
California	0	0	1,800	450	19,800	7,200	160,800	79,230	182,400	86,880
Other	0	13,089	0	0	0	0	0	0	0	13,089
Total	0	13,089	89,962	44,215	46,800	92,650	160,800	79,230	297,562	229,184
Grand total	7,500	16,361	690,172	345,034	77,250	168,312	160,800	112,988	935,722	642,695
					8 Small Shippers					
Domestic mills										
200 mills	0	0	44,312	16,726	0	0	0	0	44,312	16,726
201 mills	0	0	101,222	24,475	0	0	0	0	101,222	24,475
Ala., Ga.	0	0	18,094	2,480	0	0	0	0	18,094	2,480
Total	0	0	163,628	43,681	0	0	0	0	163,628	43,681
Ports										
La., Miss., Ala.	0	0	2,550	1,050	0	0	0	0	2,550	1,050
California	0	0	0	0	0	0	0	1,500	0	1,500
Total	0	0	2,550	1,050	0	0	0	1,500	2,550	2,550
Grand total	0	0	166,178	44,731	0	0	0	1,500	166,178	46,231

Appendix Table 6. Method of Transporting Cotton Purchased by Southeast Shippers at Warehouses, by Size of Shipper, Region of Purchase, and Market Outlet, 1975-76 Marketing Season

Market outlet	Region of purchase and mode of transportation								Total	
	Southeast		Southcentral		Southwest		West			
	Truck	Rail	Truck	Rail	Truck	Rail	Truck	Rail	Truck	Rail
					Number of bales					
					2 Medium-Sized Shippers					
Domestic mills										
200 mills	12,000	0	0	0	36,000	0	0	0	48,000	0
201 mills	5,440	1,525	9,151	10,676	9,671	0	6,711	5,490	24,262	24,402
Ala., Ga.	5,915	1,220	6,101	4,575	16,342	0	8,053	0	28,358	13,848
Total	23,355	2,745	15,252	15,251	62,013	0	14,764	5,490	100,620	38,250
Ports										
Texas Gulf	0	0	0	0	23,487	26,842	0	0	23,487	26,842
California	0	0	0	0	0	0	12,811	0	12,811	0
Total	0	0	0	0	23,487	26,842	12,811	0	36,298	26,842
Grand total	23,355	2,745	15,252	15,251	85,500	41,606	27,575	5,490	136,918	65,092
					8 Small Shippers					
Domestic mills										
200 mills	2,768	0	1,718	0	0	0	0	0	4,486	0
201 mills	54,638	11,324	12,613	18,504	78	4,014	0	5,292	67,329	39,134
Ala., Ga.	35,031	3,964	13,916	3,304	632	1,316	0	768	49,579	9,352
Total	92,437	15,288	28,247	21,808	710	5,330	0	6,060	121,394	48,486
Ports										
Total	0	0	0	0	0	0	0	0	0	0
Grand total	92,437	15,288	28,247	21,808	710	5,330	0	6,060	121,394	48,486

Appendix Table 7. Method of Transporting Cotton Purchased by Southcentral Shippers at Gin Points, by Size of Shipper, Region of Purchase, and Market Outlet, 1975-76 Marketing Season

Market outlet	Region of purchase and mode of transportation								Total	
	Southeast		Southcentral		Southwest		West			
	Truck	Rail	Truck	Rail	Truck	Rail	Truck	Rail	Truck	Rail
					Number of bales					
					4 Large Shippers					
Domestic mills										
200 mills	0	0	20,462	11,875	0	0	0	0	20,462	11,875
201 mills	10,000	0	51,567	28,500	0	0	0	0	61,567	28,500
Ala., Ga.	0	0	42,471	7,125	0	0	0	0	42,471	7,125
Tenn.	0	0	0	0	0	0	0	0	0	0
Other	0	0	1,250	0	0	0	0	0	1,250	0
Total	10,000	0	115,750	47,500	0	0	0	0	125,750	47,500
Ports										
La., Miss., Ala.	0	0	6,250	0	0	0	0	0	6,250	0
Total	0	0	6,250	0	0	0	0	0	6,250	0
Grand total	10,000	0	122,000	47,500	0	0	0	0	132,000	47,500
					2 Medium-Sized Shippers					
Domestic mills										
200 mills	0	0	17,925	2,362	0	0	0	0	17,925	2,362
201 mills	0	0	31,813	2,362	0	0	0	0	31,813	2,362
Ala., Ga.	0	0	1,250	0	0	0	0	0	1,250	0
Total	0	0	50,988	4,724	0	0	0	0	50,988	4,724
Ports										
La., Miss., Ala.	0	0	16,538	0	0	0	0	0	16,538	0
Total	0	0	16,538	0	0	0	0	0	16,538	0
Grant total	0	0	67,526	4,724	0	0	0	0	67,526	4,724
					2 Small Shippers					
Domestic mills										
200 mills	-0	0	1,500	1,500	0	0	0	0	1,500	1,500
201 mills	0	0	1,500	1,500	0	0	0	0	1,500	1,500
Total	0	0	3,000	3,000	0	0	0	0	3,000	3,000
Ports										
Texas Gulf	0	0	0	0	0	0	40,000	0	40,000	0
Total	0	0	0	0	0	0	40,000	0	40,000	0
Grand total	0	0	3,000	3,000	0	0	40,000	0	43,000	3,000