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VEGETABLE PROCUREMENT
by WHOLESALERS
in ALABAMA

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AUBURN UNIVERSITY

E. V. Smith, Director

Auburn, Alabama

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VEGETABLE PROCUREMENT by WHOLESALERS in ALABAMA*

D. R. STREET, *Assistant in Agricultural Economics***

E. E. KERN, JR., *Associate Agricultural Economist*

THE FUNCTION of concentrating fresh vegetables for distribution within any state or region is primarily that of wholesalers located in cities and towns along main highways and railways.

Firms in any one state often draw supplies from wide geographical areas, including foreign countries. Mass marketing of vegetables in heavily populated centers away from areas of production has contributed to the problems of procurement. An understanding of procurement practices and problems of wholesaler vegetable firms is fundamental to the development and maintenance of efficient production and marketing systems for vegetables in the Southern Region.

The primary objective of this study was to present major characteristics and procurement practices of wholesale vegetable buyers in Alabama and to point up opportunities for market adjustments based on buyer requirements, facilities, and problems. To this end, personal interviews were made with managers of all wholesale vegetable firms operating within the State in 1959. Information was recorded on prepared forms and subsequently machine processed for analysis.

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** Resigned.

FIRMS STUDIED

Firms cooperating in the study included 32 jobbers, 23 carlot receivers, four chain store representatives, and three brokers (Appendix Table 1)¹. Most of the fresh vegetables consumed within the State pass through one or more of these agencies.

Fifty-eight per cent of the firms were located in the northern part of the State (Figure 1). Carlot receivers and chain concentration points were found primarily in larger towns and cities convenient to the disposition of commodities over a wide geographical area. Jobbers were well dispersed throughout the State, and were especially adapted to the general needs of nearby customers.

Legal structures were found to differ among types of firms in the study (Appendix Table 2). Most chains and carlot receivers favored corporate or partnership arrangements whereas over one-half of the jobbers were single proprietorships. The complexity of larger firms in terms of organization and management, along with their need for raising larger amounts of capital, explain their preference. About 60 per cent of all firms had been operating under present organizational structures less than 15 years (Appendix Table 3). Jobbers and brokers were of the most recent origin. Many small firms were started following World War II, encouraged by the brisk demand for vegetables, availability of credit, and the pursuance of business opportunities by many individuals. Unlike the average, about 40 per cent of the carlot receivers and three of the four chains had been operating under present structures more than 20 years.

Gross Sales

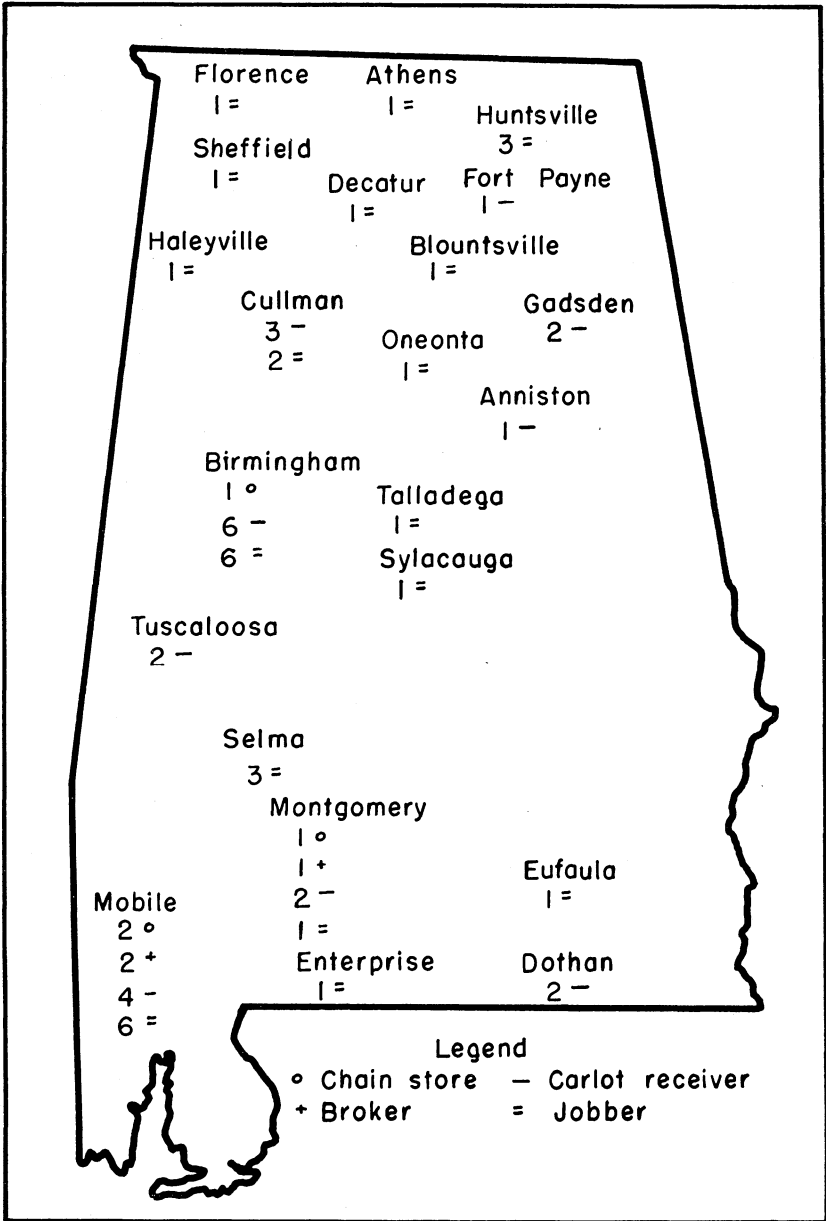
Gross sales of carlot receivers increased from \$1,116,460 in 1954 to \$1,271,733 in 1958. During this period, jobbers' sales increased from \$370,258 to \$372,654. It was also noted that while jobbers' sales matched about one-third of carlot receivers' sales in 1954, the relationship had been reduced from 33 to less than

¹ a. Jobber—buys in less than carload quantities for resale at wholesale.

b. Carlot Receiver—buys in carlot quantities for resale at wholesale.

c. Chain store representative—supervises purchases of vegetables for integrated retail outlets.

d. Broker—operates on a fee basis for other wholesalers. He may or may not take title to the vegetables.



Locations of wholesale vegetable firms in study by type, 1959, are shown above.

30 per cent 5 years later. In addition, by removing the effects of inflation² on actual dollar sales, it was found that many firms were losing economic importance although actual sales were increasing (Appendix Tables 4 and 5). For example, about 75 per cent of the carlot receivers experienced actual sales increases between 1954 and 1958; by removing inflationary effects, the number of firms experiencing gains was reduced to 56 per cent. Deflation of price data presents a clearer interpretation of changes in amounts of produce handled by firms than is possible from actual sales data. All this is indicative of the changing market structure for vegetables. Many managers reportedly were aware of this and felt their firms would be adversely affected unless they could make the required adjustments to remain competitive.

SERVICES PERFORMED

Customers

Retailers and other wholesalers were the major types of customers served by both jobbers and carlot receivers (Appendix Table 6). Approximately 70 per cent of jobbers' and 50 per cent of carlot receivers' sales were with retail outlets. Fourteen per cent of the sales volume of carlot receivers, but less than four per cent of jobbers, were with chain organizations. About 18 per cent of the sales volume of jobbers, and 8 per cent of that of carlot receivers, were with miscellaneous buyers such as restaurants, hotels, and consumers. All chain buyers served their integrated units. About 59 per cent of the carlot receivers and 61 per cent of the jobbers reporting indicated that trends in sales of fresh vegetables to all types of customers were tending to either decrease or show no appreciable change (Appendix Table 7). All chain representatives reported persistent increases in demands for products sold through their retail outlets, and continued increases were anticipated.

Storage

Adequacy of storage facilities to meet customer requirements was a matter considered by managers. Three of the four chains and a third of the carlot receivers had 20,000 or more square feet

² Wholesale price index for all commodities used to deflate data. (1954—110.3 of 1947-49; 1958—119.2 of 1947-49)

of space available for storage whereas none of the jobbers had access to facilities of this size. Almost 60 per cent of the jobbers had less than 5,000 square feet of space available (Appendix Table 8). Only one chain operator considered storage facilities adequate for future operations in line with anticipated business expansion. Approximately two-thirds of the carlot receivers and jobbers considered warehouse space adequate for the present. Less than half of both groups considered facilities adequate for future needs. All chains owned warehouse facilities that they had in use as contrasted with about two-thirds of the carlot receivers and half the jobbers who owned facilities being used.

Cooling-room facilities, considered necessary by managers in the successful handling of produce, were generally considered inadequate to meet present and future requirements. Chain representatives and carlot receivers were especially sensitive to this need. Most of these firms had above 1,000 square feet of space available as compared with only 25 per cent of the jobbers reporting this amount of capacity or above (Appendix Table 9).

Holding capacity for frozen foods was not evident among firms visited. Only five of the total had commercial-type frozen food rooms larger than consumer units. Frozen food sales were relatively unimportant among firms studied.

Transportation

More than 90 per cent of the vegetable supplies received by firms were transported by truck. Refrigerated trucks belonging to carlot receivers and jobbers were concentrated among a few firms. Averaging just under 5 trucks per firm, only 12 carlot receivers and 6 jobbers had facilities of this type. All chain operators, conversely, had such facilities ranging in number from 10 to 35 per firm. Adequacy was expressed only among carlot receivers and jobbers, not chains.

All chain organizations had from 5 to 10 non-refrigerated trucks of 2½-ton capacity. Also, more than 80 per cent of the carlot receivers and jobbers owned non-refrigerated trucks of similar capacity. Need for increased capacity was especially felt among chains.

All chains, 18 carlot receivers, and 12 jobbers had connecting rail terminals to their warehouses. Reduced need for this type of facility prompted most managers to report present facilities to be adequate.

Commodity Preparation

The matter of performing additional services to products before distribution among customers was of concern to managers. None of the chain organizations had grading facilities nor did they expect such services in the future. Twelve carlot receivers and seven jobbers were equipped to grade certain kinds of produce. Some jobbers and carlot receivers considered this type of service a possibility in effectively meeting future competition. Washing and waxing equipment was found only among a very few independent firms and further acquisition of this type of equipment was not anticipated by any of the managers interviewed.

Seventeen carlot receivers and four jobbers had boxing and bagging equipment. The likelihood of increasing these facilities by firms was considered good by these types of firms. Only one chain operator had bagging and boxing equipment, and expansion of this service by chains was not anticipated.

In summary, the absence of equipment for commodity preparation among firms, particularly chain organizations, indicates that such functions will be performed near the point of production in the future. Although some wholesalers expect to perform certain services for customers in the future, the feasibility of such activity was a matter to be determined.

Other

Chain organizations provided merchandising and advertising services for their integrated units. Only 43 per cent of the carlot receivers and 16 per cent of the jobbers were performing such services for their customers. Chains employed full-time merchandising men to work with retail outlets; only three carlot receivers and none of the jobbers interviewed had full-time men employed to assist retail customers with merchandising or other marketing tasks. Independent wholesalers were in agreement that more assistance might be provided customers in the area of marketing, although objectives and procedures were not clearly defined.

All chains furnished market information to their retail outlets, while only one each of carlot receivers and jobbers provided such service to customers. All brokers furnished market information to their clients, in addition to making sales and purchases for them.

Credit was furnished to customers by most carlot receivers and jobbers on a weekly and/or monthly basis (Appendix Table 10). Jobbers were generally more flexible in the time allowed customers for payment than were the larger receivers. Need for assistance by firms in determining credit policies was indicated. This would include help in determining types, costs, and procedures to be followed in handling customer accounts.

PROCUREMENT PRACTICES

Commodities Handled

A total of 39 commodities was handled by wholesale firms, including three types of cabbages, waxed and unwaxed sweet potatoes, and vine-ripe and green mature tomatoes (Table 1). A total of 1,459 commodity reports³ was obtained from dealers including 138 chains, 58 brokers, 481 carlot receivers, and 782 jobbers. Commodity reports were obtained directly from managers and company records along with types of packages received, selling agencies, location of purchases, and transportation used in procurement.

Chain organizations generally carried a full line of produce throughout the year. Jobbers, although less diversified than chains, maintained a more complete line of vegetables than did carlot receivers. Items produced locally such as collards, green onions, mustard greens, and turnip greens were carried in inventory by most small jobbers but not by large receivers or brokers.

Seasonality of purchases varied considerably by commodity and type of wholesaler (Appendix Table 11). Lettuce and celery were handled by almost all firms throughout the year. Rutabagas, strawberries, and several other items were stocked only on a seasonal basis. Seasonality of purchase was related to location and number of states from which supplies were drawn. Products inventoried the year round were drawn from a wide geographical area. Mature green tomatoes, once an important truck crop produced in Alabama and other states in the Southeast, were found stocked by only 25 per cent of the firms inter-

³ Commodity Report—Unit of comparison. (Example—one firm reporting one commodity represented one commodity report, 2 firms reporting 10 commodities represented 20 commodity reports, etc.).

TABLE 1. COMMODITIES HANDLED BY WHOLESALE VEGETABLE FIRMS, ALABAMA, 1959

| Commodity | Type of firm | | | | | | | | | |
|----------------------|--------------|----------|---------|----------|------------------|----------|---------|----------|-----------|----------|
| | Chain stores | | Brokers | | Carlot receivers | | Jobbers | | All firms | |
| | Number | Per cent | Number | Per cent | Number | Per cent | Number | Per cent | Number | Per cent |
| Asparagus..... | 4 | 100.0 | 2 | 66.7 | 7 | 30.4 | 6 | 18.8 | 19 | 30.6 |
| Snap beans..... | 4 | 100.0 | 1 | 33.3 | 17 | 73.9 | 26 | 81.2 | 48 | 77.4 |
| Broccoli..... | 4 | 100.0 | 2 | 66.7 | 7 | 30.4 | 4 | 12.5 | 17 | 27.4 |
| Cabbage..... | 4 | 100.0 | 2 | 66.7 | 18 | 78.3 | 30 | 93.8 | 54 | 87.1 |
| Chinese cabbage..... | 2 | 50.0 | 1 | 33.3 | 3 | 13.0 | 3 | 9.4 | 9 | 14.5 |
| Red cabbage..... | 3 | 75.0 | 1 | 33.3 | 9 | 39.1 | 8 | 25.0 | 21 | 33.9 |
| Cauliflower..... | 4 | 100.0 | 2 | 66.7 | 12 | 52.2 | 18 | 56.2 | 36 | 58.1 |
| Cantaloupes..... | 4 | 100.0 | 2 | 66.7 | 18 | 78.3 | 27 | 84.4 | 51 | 82.3 |
| Celery..... | 4 | 100.0 | 2 | 66.7 | 18 | 78.3 | 29 | 90.6 | 53 | 85.5 |
| Collards..... | 4 | 100.0 | 1 | 33.3 | 8 | 34.8 | 24 | 75.0 | 37 | 59.7 |
| Corn..... | 4 | 100.0 | 2 | 66.7 | 16 | 69.6 | 27 | 84.4 | 49 | 79.0 |
| Cucumbers..... | 4 | 100.0 | 2 | 66.7 | 15 | 65.2 | 26 | 81.2 | 47 | 75.8 |
| Eggplant..... | 4 | 100.0 | 1 | 33.3 | 14 | 60.9 | 23 | 71.9 | 42 | 67.7 |
| Endive..... | 3 | 75.0 | 2 | 66.7 | 9 | 39.1 | 16 | 50.0 | 30 | 48.4 |
| Kale..... | 0 | .0 | 1 | 33.3 | 2 | 8.7 | 1 | 3.1 | 4 | 6.5 |
| Head lettuce..... | 4 | 100.0 | 2 | 66.7 | 19 | 82.6 | 27 | 84.4 | 52 | 83.9 |
| Leaf lettuce..... | 2 | 50.0 | 1 | 33.3 | 7 | 30.4 | 6 | 18.8 | 16 | 25.8 |
| Lima beans..... | 4 | 100.0 | 1 | 33.3 | 16 | 69.6 | 25 | 78.1 | 46 | 74.2 |
| Mustard greens..... | 4 | 100.0 | 1 | 33.3 | 5 | 21.7 | 17 | 53.1 | 27 | 43.5 |
| Okra..... | 4 | 100.0 | 1 | 33.3 | 15 | 65.2 | 26 | 81.2 | 46 | 74.2 |
| Green onions..... | 4 | 100.0 | 2 | 66.7 | 16 | 69.6 | 26 | 81.2 | 48 | 77.4 |
| Peaches..... | 4 | 100.0 | 2 | 66.7 | 16 | 69.6 | 26 | 81.2 | 48 | 77.4 |
| Field peas..... | 4 | 100.0 | 1 | 33.3 | 16 | 69.6 | 25 | 78.1 | 46 | 74.2 |
| Sweet pepper..... | 4 | 100.0 | 2 | 66.7 | 16 | 43.5 | 28 | 87.5 | 50 | 80.6 |
| Hot pepper..... | 4 | 100.0 | 2 | 66.7 | 10 | | 19 | 59.4 | 35 | 56.5 |

(continued)

TABLE 1 (Continued). COMMODITIES HANDLED BY WHOLESALE VEGETABLE FIRMS, ALABAMA, 1959

| Commodity | Type of firm | | | | | | | | | |
|----------------------------|--------------|----------|---------|----------|------------------|----------|---------|----------|-----------|----------|
| | Chain stores | | Brokers | | Carlot receivers | | Jobbers | | All firms | |
| | Number | Per cent | Number | Per cent | Number | Per cent | Number | Per cent | Number | Per cent |
| New potatoes..... | 4 | 100.0 | 1 | 33.3 | 19 | 82.6 | 31 | 96.9 | 55 | 88.7 |
| Pumpkins..... | 4 | 100.0 | 2 | 66.7 | 4 | 17.4 | 7 | 21.9 | 17 | 27.4 |
| Radishes..... | 4 | 100.0 | 2 | 66.7 | 15 | 65.2 | 25 | 78.1 | 46 | 74.2 |
| Rutabagas..... | 4 | 100.0 | 2 | 66.7 | 17 | 73.9 | 27 | 84.4 | 50 | 80.6 |
| Spinach..... | 3 | 75.0 | 1 | 33.3 | 9 | 39.1 | 14 | 43.8 | 27 | 43.5 |
| Summer squash..... | 4 | 100.0 | 1 | 33.3 | 16 | 69.6 | 27 | 84.4 | 38 | 61.3 |
| Winter squash..... | 3 | 75.0 | 1 | 33.3 | 7 | 30.4 | 11 | 34.4 | 22 | 35.5 |
| Strawberries..... | 3 | 75.0 | 1 | 33.3 | 12 | 52.2 | 18 | 56.2 | 34 | 54.8 |
| Waxed sweetpotatoes..... | 3 | 75.0 | 3 | 100.0 | 15 | 65.2 | 19 | 59.4 | 40 | 64.5 |
| Unwaxed sweetpotatoes..... | 4 | 100.0 | 2 | 66.7 | 17 | 73.9 | 28 | 87.5 | 51 | 82.3 |
| Turnips..... | 4 | 100.0 | 1 | 33.3 | 12 | 52.2 | 23 | 71.9 | 40 | 64.5 |
| Red and pink tomatoes..... | 4 | 100.0 | 2 | 66.7 | 20 | 87.0 | 30 | 93.8 | 56 | 90.3 |
| Green tomatoes..... | 0 | .0 | 0 | .0 | 6 | 26.1 | 10 | 31.2 | 16 | 25.8 |
| Watermelons..... | 4 | 100.0 | 0 | .0 | 3 | 13.0 | 19 | 59.4 | 26 | 41.9 |

viewed. None of the chains reportedly carried them in inventory. The demand shift to vine-ripened tomatoes reportedly has resulted in added problems to wholesalers relative to quality maintenance of this important commodity.

The 20 items found to be of major importance to firms studied, on the basis of ranked volumes, are listed in Appendix Table 12. Commodities of primary importance to the most firms included cabbage, head lettuce, snap beans, vine-ripened tomatoes, celery, new potatoes, and summer squash. Most of the major commodities handled by firms can be produced in Alabama, and all of them can be produced in the Southern Region. Profitableness, however, would have to be related to cost and other factors to determine feasibility.

Agencies

In order of importance, firms obtained vegetables through broker-receivers, growers, shipper-growers, farmers' markets, jobbers, and repackers (Table 2). Although broker-receivers were the main source of fresh vegetables for chains, carlot receivers, jobbers, shipper-growers, and growers were also important sources. Farmers' markets were found to be of some importance to jobbers and carlot receivers as procurement agencies but were of no importance as supply sources for chain operators or brokers. Implications extend to market planning and development in that volume handled through small concentration points in the future will likely diminish. Therefore, recovery of expenditures for small concentration markets for this reason will be made difficult. Facts indicate the importance of direct marketing of vege-

TABLE 2. AGENCIES THROUGH WHICH PURCHASES OF VEGETABLES WERE MADE BY WHOLESALE FIRMS FOR 1,459 COMMODITY REPORTS, ALABAMA, 1959

| Selling agency | Type of buyer | | | |
|----------------------|-----------------|-----------------|------------------|-----------------|
| | Chain stores | Brokers | Carlot receivers | Jobbers |
| | <i>Per cent</i> | <i>Per cent</i> | <i>Per cent</i> | <i>Per cent</i> |
| Broker-receiver..... | 55.0 | 34.0 | 40.0 | 56.0 |
| Repacker..... | 1.0 | 1.0 | 1.0 | 1 ¹ |
| Jobber..... | 0.0 | 0.0 | 1 ¹ | 2.0 |
| Grower..... | 38.0 | 14.0 | 24.0 | 27.0 |
| Shipper-grower..... | 6.0 | 51.0 | 31.0 | 4.0 |
| Farmers' market..... | 0.0 | 0.0 | 4.0 | 11.0 |
| Total..... | 100.0 | 100.0 | 100.0 | 100.0 |

¹ Less than 0.5 per cent.

tables from growers to wholesalers or from producer-assembly operators directly to wholesalers. Absence of intermediaries in marketing channels places added responsibilities on producers and first handlers for quality maintenance of produce ultimately consumed.

Location of Supply

The 62 firms studied reported procurement of vegetables in 36 states and 3 foreign countries (Appendix Table 13). The state of origin does not necessarily reflect origin of production, but merely the point of purchase for the firms reporting. Chains and carlot receivers, while drawing heavily on Alabama for supplies, also established contact in more distant supply areas of the nation. Florida, California, Texas, and North Carolina were important procurement areas. The more limited range was evident among jobbers in the procurement of supplies. Their reports indicated that 85 per cent of purchases originated in Alabama with Florida and Georgia following in order of importance.

The number of states from which vegetables were drawn was related to the specific commodity involved (Appendix Table 14). Lima beans, mustard greens, field peas, and watermelons were drawn from only 6 states each; new potatoes, tomatoes, and cabbage were drawn from 17 to 20 states. For the 20 major commodities handled by firms, the range in number of states of origin during the year was from 6 to 20. Location of quality produce reportedly was the most important factor in determining specific areas of procurement. Wholesale dealers indicated that they wanted the best quality of vegetables available at competitive prices, but they did not want "cheap produce" at any price. Other factors of importance included availability, price, and pack (Appendix Tables 15 and 16).

Method of Purchase

Information was obtained from wholesalers regarding relative importance of consignment, contract, F.O.B. shipping point, and F.O.B. delivery point in the purchasing of major commodities.

Chains and brokers reportedly made no purchases of major commodities either by consignment or contract. Commodity reports revealed that bases of purchase were almost evenly divided between an F.O.B. shipping point and F.O.B. delivery point.

Commodity reports of both carlot receivers and jobbers indicated that purchases of major commodities were made primarily on an F.O.B. shipping point basis. Consignment arrangements were made only occasionally by these types of firms. Only one carlot receiver had one contract to purchase a major commodity. None of the major commodities bought by jobbers were obtained on a contractual basis.

Containers Preferred

Containers represent an important part of marketing costs for most vegetables. Also, they contribute to the acceptance by the trade of produce from different locations. Thirty-two of 35 firms reporting snap beans to be a major commodity preferred to receive them in bushel hampers. Thirty-five of the 39 firms reporting cabbage as a major commodity preferred 50-pound mesh bags, while the remainder preferred crates. All 39 reports received from firms, where head lettuce was a major commodity, preferred fiberboard vacuum-cooled packages. Fifteen of 19 reports on new potatoes showed preferences for 50-pound sacks, while three preferred 100-pound sacks and one preferred to receive in bulk. The 20-pound fiberboard box was listed as a preference 25 times out of 33 reports on red and pink tomatoes. The remainder of the answers relating to container preferences for tomatoes was divided among 40-pound fiberboard box, 60-pound wirebound crate, and 60-pound fiberboard box. Only one firm desired to receive in bulk (Appendix Table 17). Vegetable buyers were more concerned about types of containers being used for some commodities than for others. Several preferred containers were named for green-ripe tomatoes, collards, cucumbers, lima beans, rutabagas, turnips, and strawberries.

Container preferences of wholesalers were influenced by the disposition of products, including facilities for handling. Aid in quality maintenance, using that standard to the trade, ease of handling, and supplying customer demand were major factors underlying preferences for major commodity reports obtained (Appendix Table 18). Price discounting was reported where a variety of sizes and types of containers was used. Inferior and non-standardized containers for specific vegetables reportedly were costly in terms of quality loss, cost of repacking, and price discounting. The need for giving more attention to the accept-

ability and cost of containers used in marketing of the most perishable items was emphasized by produce managers.

Varieties Preferred

Variety types preferred for selected commodities were reported as follows:

Snap beans – Kentucky Wonder
Cabbage – Flat Dutch
Celery – Pascal
Lettuce – Iceberg type
Field peas – Purple Hull
Squash – Yellow Crookneck

Firm managers generally showed less concern about varieties of vegetables received than about containers preferred. Although they were often at a loss to name preferred varieties of specific commodities, many managers could suggest types of commodities demanded by the trade. Of the 254 major commodity reports received from firms, 109 indicated no specific variety preferences (Appendix Table 19). This included 66 per cent of cabbage reports, 42 per cent of celery reports, 59 per cent of lettuce reports, 75 per cent of red and pink tomato reports, and 53 per cent of reports on new potatoes. Reasons for selecting variety-types where indicated were based primarily on trade demand and ability of product to maintain quality.

PROBLEM AREAS

Firm managers were asked to identify important problems confronting them. Areas covered included problems associated with customer demand, systems of supply, and internal operations. Overlapping ideas among managers was to be expected in obtaining information relative to obstacles hindering market improvement.

1. Expanding or at least maintaining sales volume was of primary concern to many small wholesalers. Apprehensions expressed appeared well grounded in view of sales trends and structural adjustments occurring as indicated. The intensity of the problem for firms appeared related to the amount of business done with retailers. Where trade with chains or other wholesalers was significant, the problem of decreased sales was less severe.

2. Lack of facilities for handling and servicing customers and products was noted among some wholesale firms. This related to machinery and equipment, cooling and warehouse space, and facilities for providing credit and business services. In general, labor-saving devices were absent in the firms studied. Hand methods were employed extensively.

3. The presence of non-graded produce in marketing channels was the most important supply problem listed by firm managers. Fifty-four firms, or 87 per cent, including all chains and brokers, 20 carlot receivers, and 27 jobbers reported this to be a major barrier to obtaining adequate supplies of fresh vegetables, particularly from nearby producing areas.

4. Thirty-seven firm managers, or about 60 per cent, reported inadequate packaging to be an important barrier to efficient procurement. Large handlers including chains, brokers, carlot receivers, and some jobbers, were particularly concerned with this situation. Too little consideration was believed given this factor presently by producers and/or first handlers. Poor packaging was reported as an important cause of loss among major commodity reports analyzed. Importance of packaging was emphasized by managers who reported this to have a substantial influence in determining their preferred areas of purchase. The common use of the market basket for marketing tomatoes in Alabama was cited often as evidence of poor choice in the selection of containers by local sellers.

5. Twenty-six firm managers, or 42 per cent, reported that the quality of locally grown produce was inferior to that coming from other areas. Jobbers, somewhat dependent on local produce, were especially concerned about this situation. "Topping" of packages with good produce, while permitting a less desirable quality to remain underneath, was a common complaint. Dependence upon a few reputable growers for supplies or resorting to inspection of individual lots, a costly process, was the result.

6. Lack of dependability in delivery of produce was cited as a barrier to local market improvement. Also, a general lack of growers' appreciation of marketing problems was felt to exist.

7. Peddling and dumping of produce by growers in local markets was considered detrimental to the trade. Market gluts, low market prices, and poor quality were reported to result from this action.

8. Facilities for handling produce were considered lacking by 21 firm managers, including 2 chains, 11 carlot receivers, and 8 jobbers. Adequate facilities for the concentration of products, and of providing needed services, were considered necessary to overcome many other obstacles mentioned. It should be noted however that large buyers were not using farmers' markets as procurement agencies even when available.

9. Loss among major commodities handled resulted primarily from price changes or the inability to move produce and to improper handling practices such as poor packaging, poor quality related to overmaturity, and delays in transit (Appendix Table 20). Improper handling was related to the lack of cooling facilities at different levels of marketing and to poor transportation facilities at the producer level. Earlier interviews made with truck farmers indicate the lack of transportation facilities among growers.^{4, 5} Regarding pricing, a major complaint was the inability to obtain accurate information in some procurement areas.

10. Obtaining of volume requirements was a major concern among buyers. Of the major commodity reports received, availability in required volumes was reported 58 per cent of the time as the primary factor in determining preferred areas of procurement.

SUMMARY AND CONCLUSIONS

The primary objective of this study was to determine characteristics, practices, and problems of wholesale produce firms in Alabama to provide a basis for understanding changing conditions and production and marketing adjustments needed in the area. Data for the study were obtained through personal interviews in 1959 with 62 firms throughout the State. Businesses contacted included 3 brokers, 4 chain store representatives, 23 carlot receivers, and 32 jobbers. Most of the fresh produce consumed within the State is channeled through one or more of these firms.

Legal structures of firms included 24 single proprietorships, 20 partnerships, and 18 corporations. Three of the chains and 12 of the carlot receivers were corporations while only 2 of the 32 jobbers had corporate structures.

⁴ Kern, E. E., "Farm Marketing of Truck Crops in Baldwin County," Circular 130, Alabama Agricultural Experiment Station, June 1959, p. 6.

⁵ _____, "Farm Marketing of Truck Crops in Houston County," Circular 132, Alabama Agricultural Experiment Station, June 1959, p. 6.

Gross sales of carlot receivers averaged \$1,116,460 in 1954 and \$1,271,733 in 1958. Jobbers' sales during the same two periods were \$370,258 and \$372,654, respectively. After removing the effects of inflation from dollar sales, many firms showed declining sales' trends. About 50 per cent of the sales' volume of carlot receivers and 70 per cent of that of jobbers was to retailers, other than chains.

Firms received 39 different vegetables from 36 states and 3 foreign countries. In order of importance, Alabama, Florida, California, Georgia, Texas, and North Carolina were the leading sources of supply. Availability, price, and pack were major factors underlying choices of preferred areas of procurement. "No sale" or price change, weather variability, improper holding temperatures, over maturity, and improper packaging were major factors contributing to product loss among major items received.

Procurement agencies, in order of importance, included broker-receivers, growers, shipper-growers, farmers' markets, and jobbers. Although farmers' markets were of some importance to jobbers and carlot receivers, they were of no importance to chains or brokers as procurement agencies. Seasonality of purchase was more pronounced among jobbers and carlot receivers than among chains interviewed.

F.O.B. shipping point and delivery point were the primary methods of purchasing commodities. Chains and brokers reportedly received no products through consignment or contractual arrangements, while such arrangements were made only occasionally by carlot receivers or jobbers.

Physical facilities were considered inadequate in some cases by firms reporting. Inadequacy related particularly to warehouse, cooling room, and frozen food storage areas. In addition, very few modern labor-saving devices, such as unloading conveyors and forklift trucks were being used by firms.

Problem areas cited by firms related to adjustments needed resulting from business changes affecting competitive efficiency, operating problems relating to services that should be performed for customers, and production and market adjustments needed to be followed by producers and others who service wholesalers.

Several implications can be derived for this study. These include:

1. Carlot receivers and jobbers must find ways to accommodate the present market structure or continue to decline in impor-

tance. Increased activities of chain outlets have been responsible for drastic alteration in procurement patterns and procedures. Increased demands for product processing, mass distribution of services and products, and specialized assistance in marketing have placed the necessity for change upon small wholesalers. Alternatives seem to lie in the area of horizontal and/or vertical integration to achieve the advantages of specialization of resources where needed. Cooperative and voluntary contractual arrangements with firms at various levels of marketing, including farm firms, are a distinct possibility.

2. Independent wholesalers expressed interest in diversification of products, services, and customers under present organizational arrangements. This would include providing special processing functions; business assistance to customers such as merchandising, price information, and credit; in addition to serving chains and others on a specified basis. The manner and extent to which firms might proceed along these lines profitably provide a basis for investigation. The need for assistance in analyzing alternative procedures and costs was indicated. Thus, agencies with appropriate facilities for serving the vegetable industry at this level of marketing in the future have opportunities for service.

3. Chain stores are increasingly making direct purchases of commodities on a specification basis from large growers and shippers who can provide supplies to meet trade requirements. Thus, possibilities exist for certain growers who can meet rigid demand requirements with respect to quality, volume, and pack to gain a larger proportion of the market. Contract sales may provide participants an opportunity for sharing risks in direct marketing. More suitable arrangements between producers and distributors of fresh produce need be developed.

4. Based on buyer attitudes found in this study, future marketing opportunities are extremely limited for small growers operating in a sporadic manner. Cooperative marketing might be the appropriate procedure by which small growers could supply large buyers on a specification basis; however, cooperatives do not guarantee success in marketing, and wisdom would need to be exercised in such ventures.

5. Based on buyer procurement practices, the need for expanding market facilities such as small farmers' markets, tried in the past in Alabama, cannot be substantiated. A good produce

market should permit close communication of buyers and sellers and have adequate facilities for handling large quantities of produce in a short period of time. Prices paid should represent supply-demand conditions in the entire market area. In the absence of other economic factors, the construction of buildings, loading platforms, and sheds do not necessarily meet the test of a competitive market.

6. Continual education among market participants regarding improving the condition of produce sold, including grading and packing, would be supported by the firms interviewed. Investigation of regulatory activity desirable to accomplish this was considered a possibility.

APPENDIX

APPENDIX TABLE 1. NUMBER OF WHOLESALE VEGETABLE FIRMS IN ALABAMA BY TYPE, 1959

| Type of firm | Firms reporting | |
|-----------------------|-----------------|-----------------|
| | <i>Number</i> | <i>Per cent</i> |
| Chain stores..... | 4 | 6.5 |
| Brokers..... | 3 | 4.8 |
| Carlot receivers..... | 23 | 37.1 |
| Jobbers..... | 32 | 51.6 |
| Total..... | 62 | 100.0 |

APPENDIX TABLE 2. LEGAL STRUCTURES OF WHOLESALE VEGETABLE FIRMS, ALABAMA, 1959

| Type of firm | Legal structure | | | |
|-----------------------|-------------------|---------------|---------------|---------------|
| | Single proprietor | Partnership | Corporation | Total |
| | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> |
| Chain stores..... | 0 | 1 | 3 | 4 |
| Brokers..... | 2 | 0 | 1 | 3 |
| Carlot receivers..... | 5 | 6 | 12 | 23 |
| Jobbers..... | 17 | 13 | 2 | 32 |
| Total..... | 24 | 20 | 18 | 62 |
| Per cent..... | 38.7 | 32.3 | 29.0 | 100.0 |

APPENDIX TABLE 3. OPERATION UNDER PRESENT ORGANIZATIONAL STRUCTURES, WHOLESALE VEGETABLE FIRMS, ALABAMA, 1959

| Years of operation | Type of firm | | | | | | | | | |
|--------------------|--------------|-------|---------|-------|------------------|-------|---------|-------|-----------|-------|
| | Chain stores | | Brokers | | Carlot receivers | | Jobbers | | All firms | |
| | No. | Pct. | No. | Pct. | No. | Pct. | No. | Pct. | No. | Pct. |
| Less than 5..... | 1 | 25.0 | 2 | 66.7 | 3 | 13.0 | 7 | 22.0 | 13 | 21.0 |
| 5 to 9.9..... | 0 | .0 | 1 | 33.3 | 2 | 8.7 | 5 | 15.6 | 8 | 12.9 |
| 10 to 14.9..... | 0 | .0 | 0 | .0 | 9 | 39.2 | 9 | 28.1 | 18 | 28.9 |
| 15 to 19.9..... | 0 | .0 | 0 | .0 | 0 | .0 | 4 | 12.5 | 4 | 6.5 |
| 20 to 24.9..... | 0 | .0 | 0 | .0 | 4 | 17.4 | 2 | 6.2 | 6 | 9.7 |
| 25 and over..... | 3 | 75.0 | 0 | .0 | 5 | 21.7 | 5 | 15.6 | 13 | 21.0 |
| Total..... | 4 | 100.0 | 3 | 100.0 | 23 | 100.0 | 32 | 100.0 | 62 | 100.0 |

APPENDIX TABLE 4. GROSS SALES OF VEGETABLES BY WHOLESALE FIRMS, ALABAMA, 1954 AND 1958.

| Gross sales | 1954 | | | 1958 | | |
|--------------------------|------------------|---------------|---------------|------------------|---------------|---------------|
| | Carlot receivers | Jobbers | All firms | Carlot receivers | Jobbers | All firms |
| | Per cent | Per cent | Per cent | Per cent | Per cent | Per cent |
| Less than \$250,000..... | 12.5 | 42.1 | 28.6 | 11.8 | 53.8 | 37.2 |
| 250,000 to 499,999..... | 31.2 | 36.8 | 34.2 | 17.6 | 23.1 | 20.9 |
| 500,000 to 999,999..... | 12.5 | 15.8 | 14.3 | 23.5 | 15.4 | 18.6 |
| 1,000,000 and over..... | 43.8 | 5.3 | 22.9 | 47.1 | 7.7 | 23.3 |
| Total..... | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> |
| Firms reporting..... | 16 | 19 | 35 | 17 | 26 | 43 |

APPENDIX TABLE 5. CHANGES IN GROSS SALES BETWEEN 1954 AND 1958 AMONG CARLOT RECEIVERS AND JOBBERS REPORTING, ALABAMA (EXPRESSED BOTH IN ACTUAL AND CONSTANT DOLLAR AMOUNTS)

| Direction of change | Type of firm | | |
|-------------------------------|------------------|----------|-----------|
| | Carlot receivers | Jobbers | All firms |
| | Per cent | Per cent | Per cent |
| <i>Current 1958 Dollars:</i> | | | |
| Increased..... | 75.0 | 57.9 | 65.7 |
| Decreased..... | 12.5 | 31.6 | 22.9 |
| No change..... | 12.5 | 10.5 | 11.4 |
| Total..... | 100.0 | 100.0 | 100.0 |
| <i>Constant 1954 Dollars:</i> | | | |
| Increased..... | 56.2 | 57.9 | 57.1 |
| Decreased..... | 43.8 | 42.1 | 42.9 |
| No change..... | .0 | .0 | .0 |
| Total..... | 100.0 | 100.0 | 100.0 |

APPENDIX TABLE 6. PERCENTAGE OF VEGETABLE SALES BY TYPE OF CUSTOMER, WHOLESALE FIRMS, ALABAMA, 1959

| Type of customer | Volume of sales | | |
|-------------------|------------------|-----------------|-----------------|
| | Carlot receivers | Jobbers | Brokers |
| | <i>Per cent</i> | <i>Per cent</i> | <i>Per cent</i> |
| Retailers..... | 48.0 | 70.6 | 0.0 |
| Chain stores..... | 14.0 | 3.9 | 50.0 |
| Wholesalers..... | 30.4 | 7.8 | 50.0 |
| Others..... | 7.6 | 17.7 | 0.0 |
| Total..... | 100.0 | 100.0 | 100.0 |

APPENDIX TABLE 7. TREND IN VEGETABLE SALES BY CARLOT RECEIVERS AND JOBBERS REPORTING BY TYPE OF CUSTOMER, ALABAMA, 1959

| Direction of trend | Type of customer | | | | |
|--------------------------|------------------|-----------------|-----------------|-----------------|-----------------|
| | Retailers | Chains | Wholesalers | Others | Total |
| | <i>Per cent</i> | <i>Per cent</i> | <i>Per cent</i> | <i>Per cent</i> | <i>Per cent</i> |
| <i>Carlot receivers:</i> | | | | | |
| Increasing..... | 42.0 | 63.0 | 20.0 | 50.0 | 41.0 |
| Decreasing..... | 5.0 | 0.0 | 50.0 | 50.0 | 22.0 |
| No change..... | 53.0 | 37.0 | 30.0 | 0.0 | 37.0 |
| Total..... | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| <i>Jobbers:</i> | | | | | |
| Increasing..... | 31.0 | 67.0 | 33.0 | 47.0 | 39.0 |
| Decreasing..... | 31.0 | 0.0 | 17.0 | 0.0 | 18.0 |
| No change..... | 38.0 | 33.0 | 50.0 | 53.0 | 43.0 |
| Total..... | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

APPENDIX TABLE 8. WAREHOUSE SPACE AVAILABLE TO WHOLESALE VEGETABLE FIRMS, ALABAMA, 1959

| Square feet of floor space | Firms reporting | | | | | |
|----------------------------|-----------------|-----------------|------------------|-----------------|---------------|-----------------|
| | Chain stores | | Carlot receivers | | Jobbers | |
| | <i>Number</i> | <i>Per cent</i> | <i>Number</i> | <i>Per cent</i> | <i>Number</i> | <i>Per cent</i> |
| None..... | 0 | 0.0 | 0 | 0.0 | 1 | 3.1 |
| Less than 5,000..... | 0 | 0.0 | 5 | 21.7 | 19 | 59.4 |
| 5,000 to 19,999..... | 1 | 25.0 | 10 | 43.5 | 12 | 37.5 |
| 20,000 and over..... | 3 | 75.0 | 8 | 34.8 | 0 | 0.0 |
| Total..... | 4 | 100.0 | 23 | 100.0 | 32 | 100.0 |

APPENDIX TABLE 9. COOLING SPACE AVAILABLE TO WHOLESALE VEGETABLE FIRMS, ALABAMA, 1959

| Square feet of floor space | Type of firm | | | | | |
|----------------------------|---------------|-----------------|------------------|-----------------|---------------|-----------------|
| | Chain stores | | Carlot receivers | | Jobbers | |
| | <i>Number</i> | <i>Per cent</i> | <i>Number</i> | <i>Per cent</i> | <i>Number</i> | <i>Per cent</i> |
| None..... | 0 | 0.0 | 1 | 4.3 | 4 | 12.5 |
| Less than 1,000..... | 1 | 25.0 | 8 | 34.8 | 20 | 62.5 |
| 1,000 to 4,999..... | 2 | 50.0 | 8 | 34.8 | 7 | 21.9 |
| 5,000 and over..... | 1 | 25.0 | 6 | 26.1 | 1 | 3.1 |
| Total..... | 4 | 100.0 | 23 | 100.0 | 32 | 100.0 |

APPENDIX TABLE 10. TERMS OF CREDIT FURNISHED BY CARLOT RECEIVERS AND JOBBERS TO CUSTOMERS, ALABAMA, 1959

| Credit terms | Type of firm | | |
|-----------------------|------------------|---------------|---------------|
| | Carlot receivers | Jobbers | All firms |
| | <i>Number</i> | <i>Number</i> | <i>Number</i> |
| Monthly..... | 14 | 25 | 39 |
| Bi-weekly..... | 2 | 4 | 6 |
| Weekly..... | 21 | 27 | 48 |
| Ticket-to-ticket..... | 3 | 3 | 6 |
| Firms in study..... | 23 | 32 | 55 |

APPENDIX TABLE 11. PURCHASE OF COMMODITIES BY SEASONS, 62 WHOLESALE VEGETABLE FIRMS, ALABAMA, 1959

| Commodity | Type of firm | | | | | | | | | | | | | | | | | | | |
|----------------------|------------------------|-----|-----|-----|--------------|-----|-----|-----|------------------|--------------|-----|-----|---------|-----|--------------|-----|-----|-----|-----|--------------|
| | Chain stores | | | | Brokers | | | | Carlot receivers | | | | Jobbers | | | | | | | |
| | Seasons of purchases | | | | | | | | | | | | | | | | | | | |
| | JFM | AMJ | JAS | OND | All Seas. | JFM | AMJ | JAS | OND | All Seas. | JFM | AMJ | JAS | OND | All Seas. | JFM | AMJ | JAS | OND | All Seas. |
| | <i>Number of firms</i> | | | | | | | | | | | | | | | | | | | |
| Asparagus..... | 3 | 4 | 2 | 1 | 4 | 2 | 2 | 1 | 1 | 2 | 5 | 7 | 2 | 4 | 7 | 5 | 2 | 1 | 3 | 6 |
| Snap beans..... | 4 | 4 | 4 | 4 | 4 | 1 | 1 | 1 | 1 | 1 | 13 | 15 | 13 | 13 | 17 | 25 | 26 | 25 | 25 | 26 |
| Broccoli..... | 3 | 2 | 2 | 4 | 4 | 1 | 0 | 1 | 2 | 2 | 6 | 6 | 4 | 6 | 7 | 4 | 1 | 1 | 4 | 4 |
| Cabbage..... | 3 | 4 | 3 | 4 | 4 | 1 | 1 | 2 | 1 | 2 | 18 | 18 | 18 | 18 | 18 | 29 | 29 | 28 | 29 | 30 |
| Chinese cabbage..... | 2 | 2 | 2 | 2 | 2 | 1 | 0 | 0 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Red cabbage..... | 2 | 3 | 2 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 9 | 8 | 8 | 8 | 9 | 8 | 8 | 8 | 8 | 8 |
| Cauliflower..... | 3 | 3 | 3 | 4 | 4 | 1 | 1 | 1 | 2 | 2 | 11 | 11 | 7 | 12 | 12 | 18 | 15 | 12 | 18 | 18 |
| Cantaloupes..... | 0 | 3 | 4 | 1 | 4 | 0 | 2 | 2 | 0 | 2 | 5 | 17 | 16 | 3 | 18 | 6 | 27 | 27 | 4 | 27 |
| Celery..... | 4 | 4 | 4 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 18 | 17 | 17 | 17 | 18 | 28 | 29 | 27 | 28 | 29 |
| Collards..... | 4 | 2 | 2 | 4 | 4 | 1 | 0 | 1 | 1 | 1 | 7 | 6 | 4 | 8 | 8 | 23 | 10 | 9 | 23 | 24 |
| Corn..... | 4 | 4 | 4 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 11 | 15 | 12 | 11 | 16 | 19 | 27 | 26 | 16 | 27 |
| Cucumbers..... | 4 | 4 | 4 | 4 | 4 | 1 | 2 | 1 | 1 | 2 | 12 | 15 | 12 | 11 | 15 | 25 | 25 | 25 | 25 | 26 |
| Eggplant..... | 4 | 4 | 4 | 4 | 4 | 1 | 1 | 1 | 1 | 1 | 12 | 14 | 12 | 11 | 14 | 21 | 22 | 22 | 21 | 23 |
| Endive..... | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 7 | 9 | 8 | 7 | 9 | 15 | 15 | 15 | 15 | 16 |
| Kale..... | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 1 | 0 | 0 | 1 | 1 |
| Head lettuce..... | 4 | 4 | 4 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 19 | 19 | 19 | 19 | 19 | 27 | 26 | 26 | 27 | 27 |
| Leaf lettuce..... | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 1 | 0 | 1 | 6 | 7 | 6 | 6 | 7 | 5 | 4 | 5 | 4 | 6 |
| Lima beans..... | 3 | 4 | 4 | 2 | 4 | 1 | 0 | 0 | 1 | 1 | 7 | 16 | 15 | 5 | 16 | 8 | 24 | 25 | 10 | 25 |
| Mustard greens..... | 4 | 2 | 2 | 4 | 4 | 1 | 1 | 1 | 1 | 1 | 3 | 4 | 3 | 4 | 5 | 13 | 10 | 7 | 16 | 17 |
| Okra..... | 3 | 4 | 4 | 3 | 4 | 1 | 1 | 1 | 0 | 1 | 7 | 15 | 13 | 4 | 15 | 6 | 26 | 24 | 5 | 26 |

(continued)

APPENDIX TABLE 11 (Continued). PURCHASE OF COMMODITIES BY SEASONS, 62 WHOLESALE VEGETABLE FIRMS, ALABAMA, 1959

| Commodity | Type of firm | | | | | | | | | | | | | | | | | | | |
|-------------------------------|------------------------|-----|-----|-----|--------------|---------|-----|-----|-----|--------------|------------------|-----|-----|-----|--------------|---------|-----|-----|-----|--------------|
| | Chain stores | | | | | Brokers | | | | | Carlot receivers | | | | | Jobbers | | | | |
| | Seasons of purchases | | | | | | | | | | | | | | | | | | | |
| | JFM | AMJ | JAS | OND | All Seas. | JFM | AMJ | JAS | OND | All Seas. | JFM | AMJ | JAS | OND | All Seas. | JFM | AMJ | JAS | OND | All Seas. |
| | <i>Number of firms</i> | | | | | | | | | | | | | | | | | | | |
| Green onions..... | 4 | 4 | 4 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 15 | 15 | 15 | 13 | 16 | 23 | 26 | 22 | 22 | 26 |
| Peaches..... | 1 | 4 | 4 | 1 | 4 | 0 | 2 | 2 | 0 | 2 | 3 | 14 | 14 | 3 | 16 | 1 | 23 | 26 | 3 | 26 |
| Field peas..... | 2 | 4 | 4 | 1 | 4 | 0 | 1 | 1 | 0 | 1 | 4 | 16 | 15 | 4 | 16 | 7 | 24 | 24 | 3 | 25 |
| Sweet pepper..... | 3 | 4 | 4 | 3 | 4 | 1 | 2 | 2 | 1 | 2 | 16 | 16 | 16 | 16 | 16 | 28 | 28 | 28 | 28 | 28 |
| Hot pepper..... | 3 | 4 | 4 | 3 | 4 | 0 | 2 | 2 | 0 | 2 | 7 | 10 | 9 | 8 | 10 | 13 | 19 | 18 | 14 | 19 |
| New potatoes..... | 2 | 4 | 4 | 1 | 4 | 1 | 1 | 0 | 0 | 1 | 13 | 19 | 12 | 6 | 19 | 15 | 30 | 14 | 5 | 31 |
| Pumpkins..... | 0 | 0 | 2 | 3 | 4 | 0 | 0 | 0 | 2 | 2 | 1 | 1 | 1 | 4 | 4 | 7 | 7 | 4 | 6 | 7 |
| Radishes..... | 4 | 4 | 4 | 4 | 4 | 1 | 1 | 2 | 1 | 2 | 15 | 15 | 15 | 15 | 15 | 23 | 24 | 24 | 23 | 25 |
| Rutabagas..... | 4 | 2 | 3 | 4 | 4 | 2 | 0 | 2 | 2 | 2 | 17 | 7 | 5 | 17 | 17 | 26 | 7 | 5 | 27 | 27 |
| Spinach..... | 3 | 2 | 3 | 3 | 3 | 0 | 0 | 1 | 0 | 1 | 7 | 6 | 6 | 8 | 9 | 13 | 10 | 10 | 13 | 14 |
| Summer squash..... | 4 | 4 | 4 | 3 | 4 | 1 | 1 | 1 | 1 | 1 | 13 | 15 | 15 | 12 | 16 | 20 | 27 | 27 | 20 | 27 |
| Winter squash..... | 2 | 1 | 1 | 3 | 3 | 0 | 0 | 1 | 0 | 1 | 5 | 4 | 5 | 8 | 8 | 9 | 5 | 6 | 11 | 11 |
| Strawberries..... | 3 | 3 | 0 | 0 | 3 | 0 | 1 | 0 | 0 | 1 | 6 | 11 | 1 | 2 | 12 | 17 | 21 | 1 | 0 | 29 |
| Waxed sweetpotatoes.. | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 15 | 14 | 13 | 15 | 15 | 19 | 15 | 15 | 17 | 19 |
| Unwaxed sweetpotatoes..... | 4 | 4 | 4 | 4 | 4 | 1 | 1 | 2 | 1 | 2 | 14 | 15 | 13 | 15 | 17 | 27 | 23 | 25 | 25 | 28 |
| Turnips..... | 4 | 4 | 4 | 4 | 4 | 1 | 1 | 1 | 1 | 1 | 10 | 8 | 3 | 10 | 12 | 20 | 14 | 11 | 21 | 23 |
| Red and pink tomatoes..... | 4 | 4 | 4 | 4 | 4 | 1 | 1 | 2 | 1 | 2 | 20 | 20 | 19 | 19 | 20 | 29 | 29 | 29 | 29 | 30 |
| Green tomatoes..... | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 6 | 5 | 6 | 6 | 9 | 7 | 8 | 8 | 10 |
| Watermelons..... | 0 | 4 | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 3 | 1 | 3 | 10 | 26 | 26 | 8 | 29 |

APPENDIX TABLE 12. MAJOR COMMODITIES HANDLED BY WHOLESALE VEGETABLE FIRMS, ALABAMA, 1959

| Commodity | Occurrences | Commodity | Occurrences |
|---------------------------------|---------------|-----------------------|---------------|
| | <i>Number</i> | | <i>Number</i> |
| Cabbage..... | 39 | Corn..... | 6 |
| Head lettuce..... | 39 | Sweet pepper..... | 5 |
| Snap beans..... | 35 | Tomatoes (green)..... | 4 |
| Tomatoes (red and pink)..... | 33 | Collards..... | 3 |
| Celery..... | 19 | Cucumbers..... | 3 |
| New potatoes ¹ | 19 | Lima beans..... | 3 |
| Summer squash..... | 11 | Rutabagas..... | 3 |
| Field peas..... | 9 | Turnips..... | 3 |
| Sweetpotatoes..... | 9 | Strawberries..... | 2 |
| Okra..... | 7 | Watermelons..... | 2 |

¹ Not including stored potatoes.

APPENDIX TABLE 13. SOURCES OF VEGETABLE SUPPLIES, WHOLESALE VEGETABLE FIRMS, ALABAMA, 1959

| State | Times reported by firms | | | | |
|---------------------|-------------------------|---------------|------------------|---------------|---------------|
| | Chain stores | Brokers | Carlot receivers | Jobbers | All firms |
| | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> |
| Alabama..... | 98 | 19 | 255 | 668 | 1,040 |
| Florida..... | 71 | 17 | 254 | 173 | 515 |
| California..... | 36 | 17 | 109 | 53 | 215 |
| Georgia..... | 5 | 2 | 98 | 90 | 195 |
| Texas..... | 24 | 10 | 104 | 40 | 178 |
| North Carolina..... | 34 | 2 | 61 | 44 | 141 |
| Colorado..... | 23 | 19 | 23 | 30 | 95 |
| Michigan..... | 9 | 5 | 51 | 15 | 80 |
| Arizona..... | 6 | 3 | 34 | 23 | 66 |
| Louisiana..... | 11 | 14 | 28 | 13 | 66 |
| South Carolina..... | 15 | 2 | 19 | 27 | 63 |
| Mississippi..... | 12 | 6 | 16 | 24 | 58 |
| Tennessee..... | 2 | 5 | 24 | 13 | 44 |
| Illinois..... | 11 | 1 | 16 | 13 | 41 |
| Wisconsin..... | 5 | 0 | 25 | 9 | 39 |
| Virginia..... | 1 | 3 | 25 | 2 | 31 |
| Missouri..... | 2 | 0 | 11 | 11 | 24 |
| Canada..... | 3 | 1 | 15 | 5 | 24 |
| Ohio..... | 3 | 0 | 20 | 0 | 23 |
| New York..... | 3 | 1 | 12 | 3 | 19 |
| Cuba..... | 3 | 0 | 8 | 7 | 18 |
| Mexico..... | 2 | 0 | 9 | 3 | 14 |
| Indiana..... | 2 | 0 | 5 | 2 | 9 |
| New Jersey..... | 0 | 0 | 3 | 3 | 6 |
| Arkansas..... | 0 | 1 | 0 | 3 | 4 |
| Kentucky..... | 1 | 1 | 2 | 0 | 4 |
| New Mexico..... | 1 | 1 | 1 | 1 | 4 |
| Minnesota..... | 0 | 0 | 3 | 0 | 3 |
| Pennsylvania..... | 0 | 0 | 3 | 0 | 3 |
| Washington..... | 1 | 0 | 1 | 1 | 3 |
| Idaho..... | 0 | 0 | 0 | 2 | 2 |
| Maryland..... | 0 | 0 | 2 | 0 | 2 |
| Iowa..... | 0 | 0 | 1 | 0 | 1 |
| Montana..... | 0 | 0 | 0 | 1 | 1 |
| North Dakota..... | 1 | 0 | 0 | 0 | 1 |
| Nebraska..... | 1 | 0 | 0 | 0 | 1 |
| Oregon..... | 0 | 0 | 0 | 1 | 1 |
| South Dakota..... | 1 | 0 | 0 | 0 | 1 |
| West Virginia..... | 0 | 0 | 1 | 0 | 1 |

APPENDIX TABLE 14. NUMBER OF STATES INVOLVED IN PROCUREMENT OF COMMODITIES, WHOLESALE VEGETABLE FIRMS, ALABAMA, 1959

| Commodity | Type of firm | | | | |
|----------------------------|---------------|---------------|------------------|---------------|---------------|
| | Chain stores | Brokers | Carlot receivers | Jobbers | All firms |
| | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> |
| Asparagus..... | 5 | 3 | 9 | 3 | 11 |
| Snap beans..... | 5 | 6 | 9 | 8 | 11 |
| Broccoli..... | 6 | 4 | 7 | 5 | 9 |
| Cabbage..... | 11 | 3 | 15 | 11 | 18 |
| Chinese cabbage..... | 7 | 2 | 5 | 4 | 10 |
| Red cabbage..... | 11 | 1 | 11 | 6 | 15 |
| Cauliflower..... | 9 | 3 | 10 | 7 | 14 |
| Cantaloupes..... | 7 | 4 | 10 | 7 | 11 |
| Celery..... | 4 | 4 | 7 | 6 | 9 |
| Collards..... | 1 | 2 | 4 | 6 | 7 |
| Corn..... | 9 | 7 | 11 | 9 | 15 |
| Cucumbers..... | 7 | 6 | 10 | 9 | 15 |
| Eggplant..... | 4 | 4 | 9 | 12 | 16 |
| Endive..... | 5 | 4 | 11 | 8 | 15 |
| Kale..... | 0 | 1 | 3 | 3 | 6 |
| Head lettuce..... | 3 | 7 | 11 | 7 | 12 |
| Leaf lettuce..... | 3 | 1 | 9 | 2 | 9 |
| Lima beans..... | 5 | 1 | 5 | 6 | 6 |
| Mustard greens..... | 1 | 1 | 6 | 2 | 6 |
| Okra..... | 6 | 2 | 7 | 5 | 7 |
| Green onions..... | 8 | 4 | 12 | 11 | 14 |
| Peaches..... | 10 | 7 | 13 | 9 | 15 |
| Field peas..... | 4 | 3 | 5 | 4 | 6 |
| Sweet pepper..... | 5 | 6 | 13 | 11 | 15 |
| Hot pepper..... | 3 | 2 | 8 | 7 | 9 |
| New potatoes..... | 6 | 2 | 8 | 13 | 20 |
| Pumpkins..... | 7 | 2 | 4 | 3 | 9 |
| Radishes..... | 10 | 2 | 12 | 11 | 16 |
| Rutabagas..... | 4 | 3 | 8 | 9 | 12 |
| Spinach..... | 4 | 1 | 9 | 6 | 11 |
| Summer squash..... | 5 | 5 | 7 | 10 | 10 |
| Winter squash..... | 5 | 1 | 8 | 5 | 10 |
| Strawberries..... | 6 | 1 | 6 | 5 | 8 |
| Waxed sweetpotatoes..... | 3 | 5 | 11 | 5 | 11 |
| Unwaxed sweetpotatoes..... | 4 | 3 | 11 | 5 | 12 |
| Turnips..... | 5 | 1 | 6 | 9 | 10 |
| Red and pink tomatoes..... | 9 | 2 | 15 | 12 | 17 |
| Green tomatoes..... | 0 | 0 | 11 | 7 | 12 |
| Watermelons..... | 2 | 0 | 2 | 6 | 6 |

APPENDIX TABLE 15. FACTORS INFLUENCING PROCUREMENT AREA FOR 254 REPORTS ON MAJOR COMMODITIES FOR WHOLESALE VEGETABLE DEALERS IN ALABAMA, 1959

| Type of firm | Factors reported | | | | | | | | | |
|-----------------------|-------------------|------------------|---------------|---------------|-----------------|---------------|---------------|---------------------|---------------|------------------|
| | Avail- ability | Adver- tising | Varieties | Prices | Pack desired | Service | Quality | Trans- portation | Other | Total reports |
| | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> |
| Chain stores..... | 5 | 0 | 0 | 5 | 0 | 4 | 19 | 0 | 6 | 19 |
| Brokers..... | 5 | 5 | 0 | 0 | 5 | 0 | 5 | 0 | 0 | 10 |
| Carlot receivers..... | 63 | 5 | 1 | 24 | 10 | 0 | 53 | 6 | 4 | 87 |
| Jobbers..... | 73 | 0 | 1 | 37 | 4 | 8 | 104 | 2 | 1 | 138 |
| Total..... | 146 | 10 | 2 | 66 | 19 | 12 | 181 | 8 | 11 | 254 |

APPENDIX TABLE 16. FACTORS INFLUENCING PROCUREMENT FOR 254 REPORTS ON MAJOR COMMODITIES FOR WHOLESALE DEALERS IN ALABAMA BY COMMODITIES, 1959

| Commodity | Factors reported | | | | | | | | | |
|------------------------------|-------------------|------------------|---------------|---------------|-----------------|---------------|---------------|---------------------|---------------|------------------|
| | Avail- ability | Adver- tising | Varieties | Prices | Pack desired | Service | Quality | Trans- portation | Other | Total reports |
| | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> |
| Snap beans..... | 22 | 1 | 1 | 7 | 3 | 1 | 23 | 1 | 2 | 35 |
| Cabbage..... | 18 | 2 | 0 | 11 | 2 | 3 | 31 | 1 | 1 | 39 |
| Celery..... | 9 | 1 | 0 | 5 | 2 | 1 | 17 | 1 | 1 | 19 |
| Collards..... | 3 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 3 |
| Corn..... | 5 | 1 | 0 | 0 | 1 | 0 | 4 | 0 | 0 | 6 |
| Cucumbers..... | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 |
| Head lettuce..... | 19 | 2 | 1 | 11 | 2 | 2 | 31 | 2 | 4 | 39 |
| Lima beans..... | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 3 |
| Okra..... | 4 | 0 | 0 | 2 | 1 | 0 | 3 | 0 | 1 | 7 |
| Field peas..... | 6 | 0 | 0 | 2 | 1 | 0 | 6 | 1 | 0 | 9 |
| Sweet pepper..... | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 5 |
| New potatoes..... | 10 | 0 | 0 | 8 | 2 | 2 | 12 | 0 | 0 | 19 |
| Rutabagas..... | 1 | 2 | 0 | 2 | 1 | 0 | 2 | 0 | 0 | 3 |
| Summer squash..... | 7 | 0 | 0 | 2 | 1 | 0 | 7 | 0 | 1 | 11 |
| Strawberries..... | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 2 |
| Sweetpotatoes..... | 7 | 1 | 0 | 2 | 1 | 0 | 5 | 0 | 0 | 9 |
| Turnips..... | 3 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 3 |
| Tomatoes (red and pink)..... | 19 | 0 | 0 | 11 | 2 | 2 | 26 | 1 | 0 | 33 |
| Tomatoes (green)..... | 22 | 0 | 0 | 1 | 0 | 0 | 2 | 1 | 0 | 4 |
| Watermelons..... | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 |
| Total..... | 164 | 10 | 2 | 66 | 19 | 12 | 179 | 8 | 11 | 254 |

APPENDIX TABLE 17. VEGETABLE CONTAINERS PREFERRED FOR MAJOR COMMODITIES BY WHOLESALE FIRMS, ALABAMA, 1959

| Container type | | Container type | |
|-----------------------------|---------------|-----------------------------|---------------|
| <i>Commodity</i> | <i>Number</i> | <i>Commodity</i> | <i>Number</i> |
| Snap beans..... | 35 | Okra..... | 7 |
| Bu. hampers..... | 32 | Bu. hampers..... | 3 |
| Wirebound crate..... | 2 | half-bushel baskets..... | 3 |
| Bu. boxes..... | 1 | 12-quart baskets..... | 1 |
| Cabbage..... | 39 | Field peas..... | 9 |
| 50-lb. mesh bags..... | 35 | Bu. hampers..... | 7 |
| Crates..... | 4 | Sacks..... | 1 |
| Celery..... | 19 | No preference..... | 1 |
| Fiberboard cartons..... | 2 | Sweet pepper..... | 5 |
| Wood crates..... | 17 | Bu. hampers..... | 2 |
| Collards..... | 3 | Bu. baskets..... | 2 |
| Bunches..... | 1 | Mkt. baskets..... | 1 |
| Bulk..... | 1 | New potatoes..... | 19 |
| No preference..... | 1 | 50-lb. sacks..... | 15 |
| Corn..... | 6 | 100-lb. sacks..... | 3 |
| Crates..... | 4 | Bulk..... | 1 |
| Sacks..... | 2 | Rutabagas..... | 3 |
| Cucumbers..... | 3 | 50-lb. sacks..... | 3 |
| Bu. hampers..... | 1 | Squash..... | 11 |
| Wirebound crate..... | 1 | Bu. hampers..... | 9 |
| Bu. baskets..... | 1 | 12 qt. baskets..... | 1 |
| Lettuce..... | 39 | Mkt. baskets..... | 1 |
| Fiberboard carton..... | 39 | Strawberries..... | 2 |
| Lima beans..... | 3 | 16 qt. crates..... | 1 |
| Bu. hampers..... | 1 | Qt. cups..... | 1 |
| Crates..... | 1 | Sweetpotatoes..... | 9 |
| No preference..... | 1 | Bu. baskets..... | 3 |
| Turnips..... | 3 | Crates..... | 6 |
| Bunches..... | 2 | Green tomatoes..... | 4 |
| No preference..... | 1 | 60-lb. fiberboard box..... | 1 |
| Red and pink tomatoes..... | 33 | 60-lb. wirebound crate..... | 1 |
| 20-lb. fiberboard box..... | 25 | Field boxes..... | 2 |
| 40-lb. fiberboard box..... | 2 | Watermelons..... | 2 |
| 60-lb. fiberboard box..... | 1 | Bulk..... | 2 |
| Bulk..... | 1 | | |
| 60-lb. wirebound crate..... | 3 | | |
| No preference..... | 1 | | |

APPENDIX TABLE 18. REASONS FOR CONTAINER PREFERENCES AMONG 254 MAJOR COMMODITY REPORTS, WHOLESALE VEGETABLE FIRMS, ALABAMA, 1959

| Reasons for preferences | Type of firm | | | | | Per cent |
|-----------------------------|---------------|---------------|------------------|---------------|---------------|----------|
| | Chain stores | Brokers | Carlot receivers | Jobbers | All firms | |
| | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> | |
| Displays better..... | 2 | 0 | 3 | 6 | 11 | 4.3 |
| Quality maintenance..... | 11 | 4 | 26 | 40 | 81 | 31.8 |
| Demand..... | 0 | 0 | 15 | 15 | 30 | 11.8 |
| Suitable for repacking..... | 0 | 1 | 5 | 1 | 7 | 2.8 |
| Easier to handle..... | 1 | 0 | 15 | 30 | 46 | 18.1 |
| Standard to the trade..... | 4 | 5 | 19 | 36 | 64 | 25.2 |
| Less space requirements... | 1 | 0 | 1 | 4 | 6 | 2.4 |
| Costs..... | 0 | 0 | 2 | 0 | 2 | .8 |
| No reason..... | 0 | 0 | 1 | 6 | 7 | 2.8 |
| Total..... | 19 | 10 | 87 | 138 | 254 | 100.0 |

APPENDIX TABLE 19. VARIETIES OF MAJOR VEGETABLES PREFERRED BY WHOLESALE VEGETABLE FIRMS, ALABAMA, 1959

| Variety or type | | Variety or type | |
|----------------------------|---------------|------------------------|---------------|
| <i>Commodity</i> | <i>Number</i> | <i>Commodity</i> | <i>Number</i> |
| Snap beans..... | 35 | Lima beans..... | 3 |
| Kentucky Wonder..... | 27 | Fordhook..... | 1 |
| Pole type..... | 1 | No preference..... | 2 |
| Wade..... | 2 | Okra..... | 7 |
| Black Valentine..... | 3 | Clemson Spineless..... | 2 |
| No preference..... | 2 | Green Velvet..... | 1 |
| Cabbage..... | 39 | Green Pod..... | 1 |
| Flat Dutch..... | 4 | No preference..... | 3 |
| Dannish..... | 2 | Field peas..... | 9 |
| Copenhagen Market..... | 4 | Purple Hull..... | 9 |
| Round head..... | 1 | Sweet pepper..... | 5 |
| Charleston Wakefield..... | 2 | California Wonder..... | 5 |
| No preference..... | 26 | New potatoes..... | 19 |
| Celery..... | 19 | Red Pontiac..... | 3 |
| Pascal..... | 10 | Bliss Triumph..... | 4 |
| Calif. 5270..... | 1 | Red Lasoda..... | 2 |
| No preference..... | 8 | No preference..... | 10 |
| Collards..... | 3 | Rutabagas..... | 3 |
| Georgia..... | 1 | Purple Top..... | 2 |
| No preference..... | 2 | No preference..... | 1 |
| Corn..... | 6 | Squash..... | 11 |
| Golden Bantam..... | 3 | Yellow Crookneck..... | 10 |
| Golden Security..... | 1 | No preference..... | 1 |
| No preference..... | 2 | Strawberries..... | 2 |
| Cucumbers..... | 3 | Pocahontas..... | 1 |
| Crosby's Long Green..... | 1 | Blakemore..... | 1 |
| No preference..... | 2 | Sweetpotatoes..... | 9 |
| Lettuce..... | 39 | All Gold..... | 2 |
| Iceberg type..... | 15 | Porto Rico..... | 6 |
| Great Lakes..... | 1 | No preference..... | 1 |
| No preference..... | 23 | Green tomatoes..... | 4 |
| Turnips..... | 3 | Homestead..... | 1 |
| Purple Top..... | 2 | Ace..... | 1 |
| No preference..... | 1 | No preference..... | 2 |
| Red and pink tomatoes..... | 33 | Watermelons..... | 2 |
| Rutgers..... | 4 | Congo..... | 2 |
| Marglobe..... | 2 | | |
| Homestead..... | 1 | | |
| Grotham..... | 1 | | |
| No preference..... | 25 | | |

APPENDIX TABLE 20. REASONS GIVEN FOR LOSS AMONG MAJOR COMMODITIES FOR WHOLESALE VEGETABLE FIRMS, ALABAMA, 1959

| Commodity | Reasons reported | | | | | | | | | |
|------------------------------|-----------------------------------|--|---|----------------------------|-------------------------|----------------------------|------------------------------|--------------------------------|---------|------------------|
| | No sale and price change | Improper handling and poor pack- aging | Over maturity and poor quality | Equip- ment failures | Delays in transit | Diseases and insects | Improper tempera- ture | Soil and fertili- zation | Weather | Total reports |
| | Number | Number | Number | Number | Number | Number | Number | Number | Number | Number |
| Snap beans..... | 15 | 7 | 7 | 0 | 2 | 1 | 9 | 0 | 6 | 35 |
| Cabbage..... | 18 | 7 | 5 | 0 | 3 | 2 | 12 | 0 | 9 | 39 |
| Celery..... | 10 | 1 | 1 | 0 | 0 | 0 | 8 | 0 | 2 | 19 |
| Collards..... | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Corn..... | 2 | 0 | 2 | 0 | 0 | 1 | 2 | 0 | 2 | 6 |
| Cucumbers..... | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 3 |
| Head lettuce..... | 17 | 6 | 11 | 1 | 4 | 5 | 11 | 1 | 6 | 39 |
| Lima beans..... | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Okra..... | 5 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 7 |
| Field peas..... | 6 | 1 | 1 | 0 | 1 | 0 | 4 | 0 | 1 | 9 |
| Sweet pepper..... | 2 | 1 | 2 | 0 | 1 | 0 | 1 | 0 | 1 | 5 |
| New potatoes..... | 6 | 3 | 3 | 0 | 0 | 3 | 3 | 1 | 10 | 19 |
| Rutabagas..... | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 |
| Summer squash..... | 6 | 2 | 3 | 0 | 1 | 0 | 3 | 0 | 4 | 11 |
| Strawberries..... | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 |
| Sweetpotatoes..... | 5 | 0 | 1 | 0 | 0 | 2 | 2 | 0 | 4 | 9 |
| Turnips..... | 3 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 3 |
| Tomatoes (red and pink)..... | 19 | 4 | 14 | 0 | 1 | 5 | 3 | 0 | 10 | 33 |
| Tomatoes (green)..... | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 4 |
| Watermelons..... | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 2 |
| Total..... | 124 | 36 | 53 | 1 | 14 | 22 | 62 | 3 | 63 | 254 |