GAEDC

MARKETING RESEARCH REPORT NO. 1005

1Ag84MR

SELECTED TERMINAL WHOLESALE MARKETS FOR FLOWERS

U. S. D. A.
National Agricultural Library,
Received
Procurement Section
Current Serial Records

U.S. DEPARTMENT OF AGRICULTURE
ECONOMIC RESEARCH SERVICE

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

ABSTRACT

This report describes and analyzes the organization and marketing practices of 13 selected terminal wholesale markets for flowers in the United States. Personal interviews were conducted with personnel in 136 wholesale flower firms in the markets studied. In 1970, sales of the 136 wholesale firms exceeded $106 million. The largest market was New York, with sales of over $25 million. Sales by type of flower and type of customer are analyzed, as are pricing policies, credit, terms of sale, and other services. The role of transportation in moving flowers from distant shipping-point markets to the large population centers is also noted. Sales of flowers through terminal wholesale markets are increasing despite a decline in number of firms and an apparent disinterest on the part of traditional wholesale florists in the expanding mass market outlets, such as grocery chains and other nonflorist businesses.

Keywords: Flowers, Wholesale, Wholesale marketing, Ornamental plants.

Washington, D.C. 20250 July 1973

901281

PREFACE

This report draws from a study intended to analyze the structure and marketing practices of selected terminal wholesale markets for cut flowers and flowering plants. Planning for this study was under the direction of personnel in the Horticultural and Special Crops Branch, Marketing Economics Division, Economic Research Service, in cooperation with personnel from Cornell and Purdue Universities.

This report summarizes four reports issued earlier by the cooperating institutions. In addition, it gives further analysis for the markets and implications for the future. The four reports drawn from are as follows:

(1) Structure and Organization of Selected Terminal Wholesale Markets in the Northeast. Agr. Econ. Res. Rpt. 340, 39 pp., Cornell Univ., Ithaca, N.Y., January 1972.

(2) Organization and Practices in Midwestern Terminal Wholesale Markets for Flowers. Res. Bul. 886, 16 pp., Purdue Univ., Lafayette, Ind., May 1972.

(3) Organization and Practices of Selected Terminal Wholesale Flower Markets in the South. U. S. Dept. Agr., Mktg. Res. Rpt. 951, 24 pp., May 1972.

(4) Organization and Practices of Selected Terminal Wholesale Flower Markets in the West. U. S. Dept. Agr., Mktg. Res. Rpt. 960, 19 pp., June 1972.

These reports are part of a continuing effort in the U. S. Department of Agriculture to assist the commercial floriculture industry in marketing its products.

CONTENTS

	Page
HIGHLIGHTS	v
INTRODUCTION	1
PURPOSE	2
PROCEDURE	3
CHARACTERISTICS OF THE FIRMS	3
Size of Business	3
Gross Sales	3
Business Size Categories	4
Trend in Size of Business	5
Size of Labor Force	5
Form of Business Organization	10
Number of Years in Business	10
Integration of Operations	12
NONPERISHABLE FLORIST SUPPLIES	13
PERISHABLE FLORAL CROPS	17
PROCUREMENT OF SELECTED PERISHABLES	18
Geographic Origin	18
Regional Differences	18
Principal Suppliers of Selected Crops	22
Outlook	26
Basis of Acquisition	27
Transportation	29
SELLING PRACTICES	30
Type of Customer	30
Retail Florists	30
Other Wholesalers	32
Other Retail Merchants	32
Pricing Policies	32
Credit Policies	34
Terms of Sale	35
Other Services	36
MARKET ENTRY AND EXIT	37
IMPLICATIONS FOR THE FUTURE	39
LITERATURE CITED	41

HIGHLIGHTS

Terminal-market wholesalers' gross sales of flowers have been increasing. Nearly all 136 terminal-market wholesalers in 13 markets surveyed in 1970 reported that sales had increased over the 5 previous years. Their gross sales in 1970 reached a record high--almost $107 million, an average of nearly $800,000 per firm.

Increases in sales from 1965 to 1970 caused some of the 136 firms to expand in size. Seven wholesalers classified as small (less than $400,000 in annual gross sales) in 1965 grew to the medium category ($400,000-$999,000 in annual gross sales) by 1970. At the same time, 18 firms rose above the $1 million annual gross sales level.

Although volume of business increased from 1965 to 1970, the number of merchants in terminal markets decreased. However, the drop was partly offset by new or relocated establishments outside the congested central city areas. Sometimes these establishments were organized as branch operations--a trend that is expected to continue.

Confronted with a changing market, terminal-market wholesale florists have remained remarkably stable. The survey revealed that the wholesalers had been in business for an average of 30 years. About half the firms were established prior to 1940. Businesses in the South tended to be younger than those in other regions. Nearly 33 percent of the wholesalers in that region had been in operation 10 years or less, compared with only about 15 percent for the Nation.

More than 1,600 full-time employees were required to operate the 136 businesses, averaging about 12 full-time employees per establishment. There were wide variations in numbers of workers per firm within and among regions: However, there appeared to be a direct correlation between business size and number of workers. On the average, small firms required the services of five employees, medium firms, nine, and large firms, 23.

Volume of sales varied widely among the 13 markets surveyed. New York, with over $25 million in sales, had the largest volume: Atlanta, with $2.5 million in sales, had the smallest. Wholesalers in the three Northeastern markets accounted for 47 percent of the firms and 44 percent of total sales. Firms in the four Midwestern markets represented only 20 percent of the firms but nearly 30 percent of total sales.

A breakdown of sales showed that wholesalers, on the average, handled 88 percent perishable and 12 percent nonperishable florist supplies. Approximately 54 percent of the firms did not handle nonperishables. Sales of selected perishables (carnations, chrysanthemums, gladioli, and roses) accounted for 71 percent of total sales. Minor perishables (other cut flowers and greens) accounted for 18 percent of gross sales.

The traditional retail florist continues to be the principal customer for terminal-market flower wholesalers. None of the 136 wholesalers reported increased sales to nonflorist outlets.

The method wholesalers use to acquire floral crops has shown some change. Consignment, traditionally the method used, is giving way to outright purchasing. This change has become necessary because of the growing importance of distant shipping-point markets, brought about by technological improvements in production and transportation.

The 13 terminal wholesale flower markets in the study were chosen on the basis of large annual cut-flower receipts and geographic diversity. The markets are: Boston, New York, and Philadelphia in the Northeast; Chicago, Cleveland, Detroit, and St. Louis in the Midwest; Baltimore, Washington, D.C., Atlanta, and Dallas-Fort Worth in the South; and Los Angeles and San Francisco in the West.

SELECTED TERMINAL WHOLESALE MARKETS FOR FLOWERS

by

D. C. Goodrich, G. H. Sullivan, and Jules V. Powell 1/

INTRODUCTION

The floriculture industry, unlike most agricultural industries in the United States, maintains its own set of marketing institutions (6). 2/ Until recently, the agencies principally involved in marketing flowers have tended to specialize at all levels, from production to final sale. Product-line diversification and integration of wholesaling with production or retailing, so prevalent in other agricultural industries, have been slow to permeate the floriculture industry.

Lately, the commercial floriculture industry has undergone important changes in organization and structure. These changes have occurred at all levels in the marketing channel, as the production, wholesale, and retail sectors have responded to prevailing economic forces. These modifications have occurred as a result of (a) geographic shifts in flower production and distribution, spurred by technological improvement and (b) changes in consumer buying habits.

Geographic concentration of production continues to take place as areas with natural advantages emerge (1). Specialized cut-flower production has created large shipping-point markets, especially in California and Florida. Producers in these States have increased shipments to markets throughout the United States at the expense of such traditional flower-growing States as Ohio, Massachusetts, and Pennsylvania (11). More intense interregional competition has resulted. This competition is well illustrated in the case of cut carnations (2). During 1959-69, California's production of carnations tripled, and Colorado's more than doubled, while production in the other 21 States gradually declined (11, 23).

A more recent trend toward increasing imports of floral crops from Latin American suppliers also has taken place. Foreign production did not compete significantly with domestic production before 1969, but imports have expanded rapidly since that year. With new developments in production, packaging, and transportation technology, and with relative advantages in climate and labor, Central and South American flowers are being shipped profitably to the United States in only a few hours (10). The potential of Latin America as a future cut-flower supplier to the United States may be substantial (10, 14).

1/ Professor of Agricultural Economics, Cornell University; Associate Professor of Horticulture Marketing, Purdue University; CED, Economic Research Service, USDA, respectively.

2/ Underscored numbers in parentheses refer to items in Literature Cited at the end of this report.

The development of these large domestic and foreign production centers in combination with improvements in transportation and communication has reduced the economic barriers long protecting local cut-flower markets in most metropolitan areas of the United States. Therefore, local producers have resorted to growing specialty crops and more bulky potted crops or have withdrawn from floriculture.

Terminal-market wholesalers have long been important in the marketing of cut flowers in most major metropolitan areas. Their importance has remained relatively unchallenged for many years (7, 8, 17, 20). The primary functions of terminal-market wholesalers--assembling cut flowers from local and distant areas of production, breaking large shipments into smaller lots, and distributing cut flowers to other merchants--have continued about the same. These merchants remain the most important suppliers of cut flowers to retail florists (20).

However, a relatively new development in flower retailing--the entry of nonflorists into flower retailing--has resulted in growers themselves often undertaking the functions of the traditional terminal-market wholesaler. Although selling floral crops only sporadically from World War II until the early 1960's, mass merchandisers such as grocery stores and department stores now have major commitments in flower retailing. Observers of this trend foresee continued expansion (3). Many distant and nearby growers have begun to gear their operations to serving this mass distribution market. Moreover, the growers often sell directly to these retail outlets.

Availability of flowers at these "new" retail locations appears to have stimulated a change in consumer buying patterns. Attractive prices have encouraged purchases for everyday and home use rather than just for special occasions. The traditional dependence of the florist industry on flower-giving events such as weddings, illnesses, and funerals as the principal sources of sales may no longer be valid. The buying public appears to be demonstrating a willingness to acquire and use flowers more and more frequently.

PURPOSE

The present report is based on earlier reports from a study initiated as a result of the changing organizational structure of the florist industry. This report represents one part of a multiphase market research project to document the current structure of the wholesale floriculture industry and to identify some of the economic forces influencing change.

The purpose of the overall study was to identify the current role of terminal-market wholesalers in the distribution of selected cut flowers and potted plants. More specifically, the study sought (1) to determine the current organization and economic importance of terminal wholesale markets in the distribution of flowers in the United States, (2) to identify changes in importance of terminal markets, and (3) to suggest implications of these changes for the future.

PROCEDURE

A study of the role and importance of terminal-market wholesale florists in the United States was undertaken in 1970. Markets were selected on the basis of a large annual volume of cut-flower receipts and geographic diversity. The markets selected were: Boston, New York, and Philadelphia in the Northeast; Chicago, Cleveland, Detroit, and St. Louis in the Midwest; Atlanta, Baltimore, Washington, and Dallas-Fort Worth in the South; and Los Angeles and San Francisco in the West.

The sample for the study consisted of all terminal wholesale establishments handling cut flowers in the 13 markets which met the following requirements: (1) More than half of their gross annual income was from sales of perishable floral crops to retailers and wholesalers and (2) only minor amounts of these perishables originated in their own production facilities. 3/ A complete census of all such firms willing to cooperate resulted in personal interviews with owner/managers of 136 establishments. A structured, standard questionnaire was used in collecting data for the 1969-70 business year. Personnel from Cornell University, Purdue University, and the Horticultural and Special Crops Branch, MED, ERS, USDA, carried out the field work.

Results for each region were summarized and reported in separate publications (7, 8, 17, 20). This report presents summary tabulations and further analysis for all markets studied.

CHARACTERISTICS OF THE FIRMS

Size of Business

Gross Sales

Total gross sales reported by the 136 wholesale establishments for the business year ended in 1970 were nearly $107 million (table 1). Average sales per wholesaler were nearly $0.8 million per year. The volume of trade varied widely among the 13 markets. The largest market was New York, with sales of more than $25 million. The smallest was Atlanta, which reported only $2.5 million. Sales figures for some markets understated the total volume of business at the wholesale level, since an unknown but probably significant quantity of flowers was sold by both nearby and distant growers directly to retailers in the area.

Wholesalers in the three Northeastern markets accounted for 47 percent of the firms in the study and 44 percent of sales. Average sales per firm were $0.75 million. In contrast, the four Midwestern markets represented

3/ Florist supply firms were not included unless their sales of perishables were a significant part of the entire market.

Table 1--Total gross sales and average sales of 136 wholesale florists, by region and market, 1970

Region and market	Firms	Total gross sales	Average sales per firm
	Number	1,000 dollars	1,000 dollars
Northeast:			
Boston	24	11,686	487
New York	31	25,329	817
Philadelphia	8	10,490	1,311
Total	63	47,505	754
Midwest:			
Chicago	8	14,175	1,772
Cleveland	5	5,425	1,085
Detroit	9	7,374	819
St. Louis	7	4,549	650
Total	29	31,523	1,087
South:			
Atlanta	3	2,460	820
Baltimore	5	4,300	860
Washington	7	5,277	754
Dallas-Ft. Worth	7	4,915	702
Total	22	16,952	771
West:			
Los Angeles	11	5,805	528
San Francisco	11	5,061	460
Total	22	10,866	494
U.S.	136	106,846	786

about one-fifth of the firms in the study but nearly 30 percent of the sales. While variations in average firm size between markets in the Midwest were great, the overall average of nearly $1.1 million per firm was the highest of the regions studied. Wholesalers in the South accounted for one-sixth of the firms and the sales in the study. Average sales per firm were nearly $0.8 million. Wholesalers in the West had the smallest average firm size of all regions. They sold less than $0.5 million apiece, on the average, but represented one-sixth of all establishments in the study.

Business Size Categories

Wholesalers were grouped according to annual gross sales. Those reporting sales of less than $400,000 were designated as small. They comprised

nearly one-third of the total firms in the study but recorded only 10 percent of the sales (table 2). These small firms averaged less than one-quarter of a million dollars in sales per year. Medium-size firms (sales of $0.25 million to less than $1 million) accounted for about one-third of the firms and 34 percent of total sales. Sales per firm averaged $0.7 million. The large firms, selling $1 million or more, made 56 percent of total sales. They reported average sales per firm of $1.5 million.

The proportions of firms and sales represented by the three size groups in the Northeast were almost identical to the national average (the average size in the 13-market area selected for this study). In the West, however, there were proportionately more small firms, and in the Midwest, proportionately more large ones than nationally. In the South, more than one-half of the wholesalers were medium in size, compared with 39 percent nationally.

Trend in Size of Business

Nearly all wholesalers reported an increase in volume of business during the 5 years preceding the survey (1965-69). These increases were sufficient to cause some firms to shift from one size group to another. Seven wholesalers classified as small in 1965 had moved up to the medium category by 1970 (table 3). Eighteen had reached the large group by exceeding the $1 million sales level. While specific figures were not available, sales estimates for 1965 averaged about $0.65 million per firm, for all firms, or about 17 percent lower than in 1970.

This increasing size of business is an industry trend established many years earlier. Previous studies documented smaller sizes and greater numbers of businesses than the present study (6, 13). The trend towards fewer and larger businesses, of course, has not been limited to wholesale florists, but has also extended to most other businesses. Furthermore, it is likely that this trend will prevail for florists in the future, as wholesalers, through expansion, strive to realize procurement and handling efficiencies and market strength.

Size of Labor Force

More than 1,600 full-time workers were required to operate the 136 businesses in the study. Part-time help was used sparingly by most wholesalers and represented less than 10 percent of the entire labor force, or only 1 or 2 percent of the total man-equivalents in the markets.

Size of the labor force averaged about 12 full-time employees per establishment, including the manager (table 4). Only the Midwest and Northeast deviated significantly from this level, averaging 50 percent higher, and 25 percent lower, respectively. Nevertheless, in markets for which comparable data were available, the size of the work force was larger than in earlier years, again confirming the general increase in size of enterprises (6, 13).

Table 2--Total gross sales and average sales of 136 wholesale florists, by region and size of firm, 1970

Region and firm size 1/	Firms	Total gross sales	Average sales per firm
	Number	1,000 dollars	1,000 dollars
Northeast:			
Small	21	5,091	242
Medium	24	16,333	681
Large	18	26,081	1,449
Total	63	47,505	754
Midwest:			
Small	5	1,128	226
Medium	13	9,404	723
Large	11	20,991	1,908
Total	29	31,523	1,087
South:			
Small	5	1,739	348
Medium	12	8,590	716
Large	5	6,623	1,325
Total	22	16,952	771
West:			
Small	12	2,196	183
Medium	4	2,220	555
Large	6	6,450	1,075
Total	22	10,866	494
U.S.:			
Small	43	10,154	236
Medium	53	36,547	690
Large	40	60,145	1,504
Total	136	106,846	786

1/ Firm size represents annual gross sales. Small firms, less than $400,000; medium, $400,000 to less than $1 million; large, $1 million or more.

Table 3--Number of wholesale florists by region and size of firm, 136 firms, 1965 and 1970

Region and firm size 1/	1965		1970	
	Firms	Percent of region's total	Firms	Percent of region's total
	Number	Percent	Number	Percent
Northeast:				
Small	22	36	21	33
Medium	30	48	24	38
Large	10	16	18	29
Total	2/62	100	63	100
Midwest:				
Small	7	24	5	17
Medium	15	52	13	45
Large	7	24	11	38
Total	29	100	29	100
South:				
Small	7	32	5	23
Medium	12	54	12	54
Large	3	14	5	23
Total	22	100	22	100
West:				
Small	14	64	12	55
Medium	6	27	4	18
Large	2	9	6	27
Total	22	100	22	100
U.S.:				
Small	50	37	43	32
Medium	63	47	53	39
Large	22	16	40	29
Total	2/135	100	136	100

1/ Firm size represents annual gross sales. Small firms, less than $400,000; medium, $400,000 to less than $1 million; large, $1 million or more.

2/ One firm was not in business in 1965.

Table 4--Number of wholesale florists by number of full-time employees and region, 136 firms, 1970

Number of employees	Northeast	Midwest	South	West	Total
			Number of firms		
5 or less	23	4	2	10	39
6-10	18	6	8	3	35
11-20	15	11	8	5	39
21 or more	7	8	4	4	23
			Number of employees		
Total employees per market	598	524	272	240	1,634
Average employees per firm	9	18	12	11	12
			1,000 dollars		
Average sales per employee	80	60	62	45	62

Major differences in worker numbers were apparent between markets within each region. In the Northeast, for example, averages ranged from five employees per firm in Boston to 20 in Philadelphia. The Boston situation reflected the long-time participation of many one- and two-man wholesaling operations. Chicago and Cleveland had the most among Midwestern markets, with about 25 workers per firm, while Detroit and St. Louis maintained a work force less than half that size. In the South, Atlanta averaged the fewest workers.

Business size and number of workers were directly related. An average of nearly five persons was retained to support small firms, nine in medium firms, and 23 in large firms (table 5). This relationship prevailed in all regions except the West, where medium firms averaged fewer employees than the small firms.

A commonly cited measure of labor productivity is dollar sales per employee, which in this study amounted to about $62,000. Overall, markets in the South and Midwest averaged about the same, but notable variations existed among markets in both areas. At the extremes, the Dallas-Fort Worth firms in the South recorded sales of $55,000 per employee, compared with $91,000 for Atlanta. Differences among Midwestern markets were almost as great.

Los Angeles and San Francisco differed little in dollar sales per employee, but the West averaged the lowest of all regions. Markets in the Northeast reported the highest sales per employee, but differences within the region were less than those among markets in other regions.

Table 5--Total and average number of full-time employees in 136 wholesale florist firms, by size of firm and region, 1970

Region	Small firms 1/		Medium firms 2/		Large firms 3/		All firms	
	Employees in region	Average per firm	Employees in region	Average per firm	Employees in region	Average per firm	Employees in region	Average per firm
	Number							
Northeast	54	2.6	203	8.5	341	18.9	598	9.5
Midwest	27	5.4	149	11.5	348	31.6	524	18.1
South	30	7.5	130	10.0	112	22.4	272	12.4
West	88	7.3	23	5.8	129	21.5	240	10.9
U.S.	199	4.7	505	9.4	930	23.3	1,634	12.0

1/ Firms reporting less than $400,000 annual gross sales.
2/ Firms reporting $400,000 to less than $1 million annual gross sales.
3/ Firms reporting $1 million or more annual gross sales.

Small wholesalers reported substantially lower average sales per employee than did their larger counterparts. This relationship was sustained in all regions but the Northeast. There, the many Boston wholesalers with staffs of one or two persons were responsible for sales per man exceeding those of the larger firms.

Labor practices of individual firms no doubt contributed to much of this diversity in sales per man. Effective assignment and supervision of personnel perhaps were lacking in some cases, but in general, efficiencies associated with size of business were clearly indicated.

Size alone cannot explain all differences in efficiency. However, establishing other factors which had applicability for all wholesalers in the study proved difficult because of individual differences. For example, low labor efficiency in the West may well have resulted from the preoccupation of workers not only with wholesaling but also with production, in which that region is notably involved. Regardless of the causes, variation among regions, markets, and firms suggests that opportunities exist for increased efficiency in the use of labor.

Form of Business Organization

The forms of business organization of terminal-market wholesalers did not change significantly during the 1950's and 1960's (6, 22). Corporations were the predominant form of organization in every region of the United States in 1970 and represented more than 80 percent of the wholesaling establishments (table 6). These enterprises accounted for approximately 92 percent of all sales among the wholesalers studied. Among the largest firms, corporate enterprises accounted for an even larger share of sales.

Most of these corporate operations, many family owned, had been organized for tax purposes. The larger the firm, the more likely it was to be operated as a corporation. Only one of the 40 large firms took another form.

Fourteen percent of all firms were individual proprietorships. All but one of these firms were small businesses. None was in the Midwest; most were in the Northeast, mainly Boston. Partnerships accounted for only seven of the wholesalers, most of them small or medium in size.

Number of Years in Business

Wholesalers surveyed had been in business for an average of three decades (table 7). About half of the firms were established prior to 1940. Businesses in the South tended to be newer than those in other regions. Nearly one-third of the wholesalers in that region had been in operation 10 years or less, compared with only about 15 percent for the nation.

Overall, wholesale firms on the average had been operating at their present location for 10 years less than the life of those firms. Approximately one-third

Table 6--Number of wholesale florists, by size and form of business, by region, 136 wholesale florists, 1970

Region and form of business	Small firms 1/		Medium firms 2/		Large firms 3/		All firms	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Northeast:								
Individual proprietorship	13	62	1	4	--	--	14	22
Partnership	--	--	1	4	--	--	1	2
Corporation	8	38	22	92	18	100	48	76
Total	21	100	24	100	18	100	63	100
Midwest:								
Individual proprietorship	--	--	--	--	--	--	--	--
Partnership	1	20	1	8	--	--	2	7
Corporation	4	80	12	92	11	100	27	93
Total	5	100	13	100	11	100	29	100
South:								
Individual proprietorship	2	50	--	--	--	--	2	9
Partnership	--	--	1	8	1	20	2	9
Corporation	2	50	12	92	4	80	18	82
Total	4	100	13	100	5	100	22	100
West:								
Individual proprietorship	3	25	--	--	--	--	3	14
Partnership	1	8	1	25	--	--	2	9
Corporation	8	67	3	75	6	100	17	77
Total	12	100	4	100	6	100	22	100
U.S.:								
Individual proprietorship	18	43	1	2	--	--	19	14
Partnership	2	5	4	7	1	3	7	5
Corporation	22	52	49	91	39	97	110	81
Total	42	100	54	100	40	100	136	100

-- means none of the 136 wholesalers fell within the category.
1/ Firms reporting less than $400,000 annual gross sales.
2/ Firms reporting $400,000 to less than $1 million annual gross sales.
3/ Firms reporting $1 million or more annual gross sales.

Table 7--Number of firms by years in business and years at present location, by region, 136 wholesale florists, 1970

Item	Northeast	Midwest	South	West	U.S.
		Number of firms			
Years in business:					
10 years or less	9	4	7	1	21
11-20 years	13	5	--	1	19
21-30 years	13	5	4	8	30
31 or more years	28	15	11	12	66
Years at present location:					
10 years or less	22	7	11	1	41
11-20 years	12	10	--	7	29
21-30 years	14	4	4	4	26
31 or more years	15	8	7	10	40
		Number of years			
Average years in business, per firm	32	31	26	32	30
Average years at present location, per firm	22	20	19	29	23

-- means none of the 136 wholesalers fell within the category.

of the businesses had moved to different facilities since their founding. This proportion was highest in Northeastern and Midwestern markets.

Although not fully documented by the study, several of these moves had been made in the 1960's as the central city areas came under the influence of urban congestion. These same forces, as well as the search for more efficient facilities, probably will encourage more shifts in the future. In fact, the incidence of moves to different locations reported in this study might have been even higher had the data been collected 1 year later. The closing of the Boston Flower Exchange, which had been the site of flower wholesaling for decades, and the move to new facilities would have greatly affected data from the Northeast.

Integration of Operations

Integration of business operations was not an important factor in most terminal wholesale markets. A minority of wholesalers reported vertical affiliation with production or retailing enterprises or horizontal ties with other wholesaling establishments. The most common of these situations was the

business operated as the parent flower and/or florist supply wholesaling branch house of a horizontally integrated organization. This situation was reported in the case of 25 of the terminal-market establishments. Some branches, as an attempt to avoid central city congestion, were located in the suburbs of the same market area as the parent establishment. However, branches usually were not only in different markets, but also in different regions.

Proportionately more firms in the South and Midwest were integrated in this way. Approximately 25 to 30 percent of the wholesalers in these markets maintained managerial or financial ties with other wholesaling establishments, compared with 10 to 15 percent in the other regions.

Seventeen percent of the wholesalers were vertically integrated in flower production, even though there seemed to be no important recent move in this direction. In the West and Midwest, the proportions of wholesalers vertically integrated were 28 and 32 percent respectively, compared with an average of less than 10 percent in the other regions.

The volume of flowers grown by these wholesalers in the Midwest, as well as the Northeast and South, averaged only 1 to 2 percent of their sales of perishables. Crops produced by Western wholesalers, on the other hand, accounted for nearly one-fifth of the region's reported sales of perishables.

A significant number of wholesalers had definite but opposing views on the wholesaler-grower tie. Several wholesalers in the Midwest expressed intentions to integrate into production. In contrast, Western wholesalers cited the greatly differing management decisions for each type of enterprise as preventing further moves in this direction. Vertical integration into retailing was accomplished by only six wholesalers, or 4 percent of the firms. Most wholesalers did not plan to enter into retailing in the future.

Evidence from this and other studies indicates modest levels of horizontal integration by wholesalers and retailers. Yet, most terminal-market wholesalers show little inclination to integrate backward into production and even less to integrate forward into retailing. No doubt, problems would await such moves. Nevertheless, it is noteworthy that terminal-market wholesalers have chosen to forego the economic benefits of vertical and horizontal integration which others inside and outside the florist industry apparently see.

NONPERISHABLE FLORIST SUPPLIES

Nonperishable florist supplies comprise an important portion of retail florists' sales (9, 18, 19). Traditionally, full-service wholesalers in some terminal markets have served as an important source of the retail florists' supplies (6, 21, 26). This study revealed that although many wholesale firms in the terminal markets handled nonperishable supplies, their sales did not comprise a large portion of total sales. Forty-six percent of the wholesale firms handled nonperishable florist supplies. Nonperishables accounted for only 12 percent of total annual sales of all firms (table 8). Expectations in most markets are for an increase in the nonperishables share of total sales.

Table 8--Gross sales of perishables, selected perishables, minor perishables, and nonperishables, by region and market, 136 wholesale florists, 1970

Region and market	Selected perishables 1/		Minor perishables 2/		Total perishables		Nonperishables		Total	
	1,000 dollars	Percent of total sales	1,000 dollars	Percent of total sales	1,000 dollars	Percent of total sales	1,000 dollars	Percent of total sales	1,000 dollars	Percent of total sales
Northeast:										
Boston	6,391	55	3,042	26	9,433	81	2,253	19	11,686	100
New York	18,885	74	5,334	21	24,199	96	1,130	4	25,329	100
Philadelphia	6,945	66	1,547	15	8,492	81	1,998	19	10,490	100
Total	32,201	68	9,923	21	42,124	89	5,381	11	47,505	100
Midwest:										
Chicago	11,588	82	2,055	14	13,643	96	532	4	14,175	100
Cleveland	4,170	77	438	8	4,608	85	817	15	5,425	100
Detroit	4,930	67	687	9	5,617	76	1,757	24	7,374	100
St. Louis	2,945	65	798	17	3,743	82	806	18	4,549	100
Total	23,633	75	3,978	13	26,611	88	3,912	12	31,523	100
South:										
Atlanta	1,379	56	669	27	2,048	83	412	17	2,460	100
Baltimore	2,939	68	887	21	3,826	89	474	11	4,300	100
Washington	4,626	88	410	7	5,036	95	241	5	5,277	100
Dallas-Ft. Worth	2,360	48	824	17	3,184	65	1,731	35	4,915	100
Total	11,304	67	2,790	16	14,094	83	2,858	17	16,952	100
West:										
Los Angeles	4,448	77	1,307	22	5,755	99	50	1	5,805	100
San Francisco	3,921	77	960	19	4,881	96	,180	4	5,061	100
Total	8,369	77	2,267	21	10,636	98	230	2	10,866	100
U.S.	75,507	71	18,958	18	94,465	88	12,381	12	106,846	100

1/ Carnations, chrysanthemums (standard, pompons, and potted) gladioli and roses.
2/ Orchids, daisies, greens, and other minor crops.

Sales of nonperishables varied significantly by region and by size of the wholesale firm (table 8). Wholesalers in markets in the Midwest and South handled nonperishables most extensively, with 80 percent of the firms offering such products. Sales of nonperishables in the Midwest and South accounted for 12 and 17 percent of the terminal wholesalers' total sales, respectively. The sales volume of nonperishables averaged about $130,000 per firm in both regions.

Wholesalers in the Northeast derived approximately 11 percent of their total sales from nonperishables, averaging nearly $85,000 per firm annually. Proportionately fewer firms in Northeastern market areas were engaged in handling nonperishables than Midwestern and Southern firms. Only one-fourth of the Northeastern wholesalers handled nonperishables on a regular basis.

Wholesale firms in the terminal-market areas in the West handled significantly smaller volumes of nonperishables (table 8) than did firms in the other regions. Among the 25 percent of the firms handling nonperishables, only 2 percent of their gross sales volume was attributed to such products.

Few of the wholesalers had any noticeable increase in sales of nonperishables during recent years, and few anticipated significant increases in the future. Management considered the handling of nonperishables a service to the retail customers rather than a planned merchandising strategy. This philosophy appeared to be an important factor in the continued handling of nonperishables.

The relative importance of sales of nonperishables also differed by the size of the firm. Sales were higher among larger wholesalers. Furthermore, the percentage of sales volume of nonperishables generally increased with firm size (table 9). Small wholesale firms derived an average of 3 percent of their total sales from nonperishables. Large firms, handling over $1 million annually, derived nearly 13 percent of their total sales from these supplies.

The merchandising philosophy of wholesalers toward nonperishables was determined to a large extent by the type of customer they were used to serving, especially among the older, established firms. Retail florists were by far the primary source of total sales for wholesale firms in the Midwest, Northeast, and South where nonperishables are important. Consequently, the high level of sales of nonperishables, or retail florist supplies by wholesalers in these regions would be expected. In contrast, however, wholesale firms in the West were significantly less dependent upon retail florists as a source of sales. Thus, it was reasonable to expect proportionately lower sales of nonperishables.

Another factor influencing merchandising of nonperishables relates to the wholesalers' involvement in floral crop production. For example, wholesalers in the West, extensively involved in production of flower crops for sale to other wholesalers, would not be likely to undertake yet another major enterprise.

Conditions of market entry represent a third factor influencing wholesalers' sales of nonperishables. Entry of new firms into flower wholesaling has been minimal during recent years (7, 8, 17, 20). The need to provide a full product line may have been a barrier to entry in the older, established terminal-market areas of the Northeast and Midwest. Firms considering market entry in these

Table 9--Gross sales of perishables and nonperishables, by size of firm and by region, 136 wholesale florists, 1970

Region and item	Small firms 1/		Medium firms 2/		Large firms 3/		All firms	
	1,000 dollars	Percent	1,000 dollars	Percent	1,000 dollars	Percent	1,000 dollars	Percent
Perishables:								
Northeast	4,986	12	14,677	35	22,461	53	42,124	100
Midwest	1,034	4	7,706	28	18,871	68	27,611	100
South	1,613	11	7,898	56	4,583	33	14,094	100
West	2,196	21	2,220	21	6,220	58	10,636	100
U.S. total	9,829	10	32,501	35	52,135	55	94,465	100
Nonperishables:								
Northeast	105	2	1,656	31	3,620	67	5,381	100
Midwest	94	2	1,698	44	2,120	54	3,912	100
South	126	4	692	24	2,040	72	2,858	100
West	--	--	--	--	230	100	230	100
U.S. total	325	3	4,046	32	8,010	65	12,381	100

-- none of the 136 wholesalers fell within this category.
1/ Firms reporting less than $400,000 annual gross sales.
2/ Firms reporting $400,000 to less than $1 million annual gross sales.
3/ Firms reporting $1 million or more annual gross sales.

areas have initiated wholesaling operations as an adjunct to the production of perishables, expanding their wholesaling functions as market conditions dictate. Thus, the evolution of wholesale firms appears to start with flower production and reach maturity with full-service wholesaling of first perishables and then nonperishables. The relative importance of production in the wholesale firms surveyed in the West further supports this observation.

It is likely that the trends in handling nonperishables will continue with little change. Economic and market pressures within the wholesale segment of the floriculture industry have precipitated these trends and will probably assure their continuance.

PERISHABLE FLORAL CROPS

Results of this study indicate that cut flowers and potted plants are the major source of sales for wholesale florists in terminal markets (4, 5, 11, 22), with perishables averaging 88 percent of total sales (table 8).

Regional differences were found in the sales volume of perishables handled and were largely a result of market size. Firms in Northeastern terminal markets handled by far the largest total sales volume of perishables, accounting for 44 percent of the value of all perishable crops included in the study. Midwestern firms individually were the largest handlers of perishables, averaging sales of $952,000 per firm annually. Wholesale firms in the South were least dependent upon perishables as a source of sales, deriving 17 percent of the total from sales of nonperishables.

Sales of perishables varied according to the size of the firm (table 8). Generally, the sales volume of perishables increased as the size of the firm increased; at the same time, however, perishables comprised a smaller portion of total sales of the firm.

Sales of selected perishables (carnations, chrysanthemums, gladioli, and roses) were the largest source of revenue from perishables and averaged 71 percent of total sales nationally (table 8). Sales of selected perishables were more important among wholesalers in the West and averaged about 77 percent of total sales. Although wholesale firms in the New York market handled the largest absolute sales volume of selected perishables, firms in the Washington, D.C., and Chicago markets attributed the largest portion of their sales to such crops.

Sales volumes of roses and carnations were equally important, ranking ahead of sales of pompon and standard chrysanthemums and gladioli (table 10). Roses and carnations each accounted for nearly one-fifth of the gross perishables receipts for all wholesalers. Proportionately larger sales volumes of roses were reported by firms in the Midwest. Firms in the Northeast recorded slightly lower sales volumes for carnations compared with wholesalers in the other three regions.

Pompon chrysanthemums and gladioli ranked next in commercial importance among terminal-market wholesalers. Each crop averaged 14 percent of the gross

perishables receipts (table 10). Receipts from gladioli were relatively uniform among wholesalers in all regions, although significant differences among regions were found for pompons. Wholesalers in the Northeast attributed 17 percent of their sales of perishables to pompons, but firms in the West attributed only 6 percent. Standard chrysanthemums closely followed the sales patterns of pompons and gladioli.

Potted chrysanthemums were relatively unimportant as a source of gross receipts among wholesalers. They averaged only 2 percent of sales of perishables. Wholesalers in the South, however, reported that potted chrysanthemums accounted for 4 percent.

Minor perishables averaged 18 percent of wholesale florists' total sales (table 8). Firms in the Northeast and West tended to average proportionately larger sales volumes of these crops. Except for wholesale firms in the Chicago terminal-market area, Midwestern wholesalers generally relied the least on minor perishables as a source of sales.

The trends in sales of perishable flower crops will not change significantly. Some regional differences may result from interregional shifts in production and new demand pressures from retailers (3, 6). Terminal-market firms can be expected to continue handling about the same proportionate share of the sales volume of selected perishables and to benefit from increasing aggregate demand for such produce.

PROCUREMENT OF SELECTED PERISHABLES

Geographic Origin

Distant areas have become relatively more important cut-flower supply sources than in the past. The trend has been for expanded production of major perishables in the West and Florida (5, 13). California has become the dominant area of production of carnations, chrysanthemums, and roses, while Florida leads the Nation in pompon chrysanthemums and gladioli. For the 136 wholesalers surveyed, nearly 60 percent of the dollar value of the selected perishables originated in such areas well beyond the wholesalers' local supply area (table 11). The remaining "local" flowers were grown in facilities near the terminal-market areas. 4/

Regional Differences

Major differences among the several regions in the proportions of local and distant floral crops were apparent (table 11). The Northeast nearly duplicated the national average, but differences among markets in this region were significant. For example, New York received only one-third of its material

4/ Local sources are those (a) in the State within which the establishment is located and (b) within a 50-mile radius of the establishment (75-mile radius for New York, Baltimore, and Washington, D.C.). All other sources are distant.

Table 10--Gross sales of selected perishables, by region, 136 wholesale florists, 1970

Region	Carnations		Chrysanthemums						Gladioli		Roses		Total selected perishables		Total perishables	
			Standards		Pompons		Potted									
	1,000 dol.	Pct. 1/	1,000 dol.	Pct. 1/	1,000 dol.	Pct. 1/	1,000 dol.	Pct. 1/	1,000 dol.	Pct. 1/	1,000 dol.	Pct. 1/	1,000 dol.	Pct. 1/	1,000 dol.	Pct. 1/
Northeast	7,042	17	4,922	12	7,052	17	695	2	6,327	15	6,163	14	32,201	77	42,124	100
Midwest	5,906	21	3,573	13	3,696	13	139	1	3,374	12	6,945	25	23,633	85	27,611	100
South	3,078	22	1,597	11	1,547	11	551	4	1,900	13	2,631	19	11,304	80	14,094	100
West	2,069	20	1,210	11	588	6	264	2	2,030	19	2,208	21	8,369	79	10,636	100
U.S.	18,095	19	11,302	12	12,883	14	1,649	2	13,631	14	17,947	19	75,507	80	94,465	100

1/ Percent of total gross sales of perishables.

Table 11--Gross sales of selected perishables from local and distant supply sources, by region, 136 wholesale florists, 1970 1/

Region	Sales from--				Total sales	
	Local supply 2/		Distant supply 3/			
	1,000 dollars	Percent	1,000 dollars	Percent	1,000 dollars	Percent
Northeast ...	12,797	40	19,404	60	32,201	100
Midwest	7,109	30	16,524	70	23,633	100
South	3,123	28	8,181	72	11,304	100
West	7,948	95	421	5	8,369	100
U.S.	30,977	41	44,530	59	75,507	100

1/ Selected perishables are carnations, chrysanthemums, gladioli, and roses.
2/ Own production included as local purchases.
3/ Local sources include those (a) in the State within which the establishment is located and (b) within a 50-mile radius of the establishment (75-mile radius for New York, Baltimore, and the District of Columbia). All other sources are considered distant.

from the local area, while Boston and Philadelphia received one-half from such sources. The tenacity of growers near these two markets and their resistance to competing crops from other areas were responsible for this situation.

On the other hand, the West, in its proximity to major growing areas, relied almost entirely on local production. Only 5 percent of the crops handled by wholesalers in Western markets came from areas outside California.

Terminal-market wholesalers in the South and Midwest relied most on distant areas for their crops. Only about 30 percent of the sales value of flowers handled were grown locally. Market differences, however, were dramatic in the South. Atlanta and Dallas-Fort Worth markets were almost entirely dependent on outside production, but Baltimore and Washington together received 45 percent of the selected perishables from local producers. Variations among Midwestern markets were less dramatic. However, in both regions, markets which had no history of important nearby production continued to rely heavily on distant production areas for selected perishables.

The size of the wholesaler's business and his degree of reliance on local or distant sources tended to be related. Overall, the small wholesalers tended to depend more on local producers (table 12).

Table 12--Gross sales of selected perishables from local and distant supply sources, by size of firm and region, 136 wholesale florists, 1970 1/

Region and type of supply	Small firms 2/		Medium firms 3/		Large firms 4/		All firms	
	1,000 dollars	Percent	1,000 dollars	Percent	1,000 dollars	Percent	1,000 dollars	Percent
Local supply:								
Northeast 5/ ..	2,709	38	3,723	15	6,365	15	12,797	17
Midwest	355	5	1,688	6	5,066	12	7,109	9
South 6/	240	3	1,751	7	1,132	3	3,123	4
West	1,084	15	1,759	7	5,105	12	7,948	11
U.S.	4,388	61	8,921	35	17,668	42	30,977	41
Distant supply:								
Northeast	1,120	15	7,024	27	11,260	26	19,404	25
Midwest	591	8	4,929	19	11,004	26	16,524	22
South	889	12	4,974	19	2,318	6	8,181	11
West	289	4	75	7/	57	7/	421	1
U.S.	2,889	39	17,002	65	24,639	58	44,530	59
Total supply	7,277	100	25,923	100	42,307	100	75,507	100

1/ Selected perishables are carnations, chrysanthemums, gladioli, and roses.
2/ Firms reporting less than $400,000 annual gross sales.
3/ Firms reporting from $400,000 to less than $1 million annual gross sales.
4/ Firms reporting $1 million or more annual gross sales.
5/ New Jersey, Pennsylvania, Connecticut, and New Hampshire included as local.
6/ Pennsylvania, Maryland, and Virginia included as local for Baltimore and Washington, D.C.
7/ Less than 0.5 percent.

Principal Suppliers of Selected Crops

Major differences in the importance of supply areas for individual crops were related in large part to geographical production patterns. California and Florida were the leading States.

California was the most important single source of selected perishables for the 136 wholesale florists. It supplied 42 percent of the sales value of such crops in the 13 markets (table 13) even though it produced only slightly more than 30 percent of the national output (25). Florida growers supplied one-fifth of the dollar value of selected perishables in these terminal markets although the State grew less than 13 percent of the national output. In terms of the sales value of selected perishables nationwide, the 13 markets generally were heavier users from these two major production areas. Colorado was not a significant source of supply for terminal wholesalers. "All other" sources, comprised mostly of local producers, accounted for 36 percent of the sales value of selected perishables.

The role of each supply area varied according to market. For example, Western wholesalers received 95 percent of their crops from California, noted earlier as "local" crops. In contrast, California provided 48 percent of the South's needs, 39 percent of the Midwest's, and 28 percent of the Northeast's. The relative importance of California as a supply source was a function of both distance from market and prominence of the local grower/suppliers in terminal-market areas. The closer a market was to California and the less vigorous were its own local sources, the more it relied on California for its supply.

Local production, usually a large part of "all other" sources, was also the most important source in the Northeast and the South. One-third of the crops handled by wholesalers in the South and 44 percent in the Northeast came from local sources. Nonlocal sources represented in the "all other" category amounted to 4 percent of the sales volume in the Northeast and 10 and 4 percent in the Midwest and South, respectively. The South was heavily influenced by production in Pennsylvania and Maryland, which was considered local for Baltimore and Washington, D.C. The Midwest relied most heavily on producing areas beyond "local" boundaries, exclusive of the prime sources of California and Florida.

Florida was a more important supplier to the Northeast than to other regions. There it accounted for 27 percent of the sales volume of selected perishables. Florida growers supplied 16 percent of the needs of the Midwest, and surprisingly, only 18 percent of the South's. Thus, in spite of the longer distances, all Northeastern markets surpassed those in the South in their reliance on Florida products. However, Florida supplied only 5 percent of the selected perishables in the Western markets.

Only in the Midwest was Colorado a significant factor as a supplier of all selected crops. There it accounted for about 5 percent of the sales volume.

Table 13--Regional gross sales of selected perishables by origin of supply, 136 wholesale florists, 1970 1/

Origin of supply	Northeast		Midwest		South		West		U.S.	
	1,000 dol.	Pct.	1,000 dol.	Pct.	1,000 dol.	Pct.	1,000 dol.	Pct.	1,000 dol.	Pct.
California ...	9,133	28	9,286	40	5,392	48	7,948	95	31,759	42
Colorado	228	1	1,250	5	233	2	--	--	1,711	2
Florida	8,837	27	3,821	16	2,023	18	421	5	15,102	20
All other	14,003	44	9,276	39	3,656	32	--	--	26,935	36
Total	32,201	100	23,633	100	11,304	100	8,369	100	75,507	100

-- means none of the 136 wholesalers fell within the category.
1/ Selected perishables are carnations, chrysanthemums, gladioli, and roses.

Carnations. California produced more than 45 percent of the sales value of carnations nationally but supplied more than two-thirds of the sales volume to the wholesalers in this study (25). California supplied three-fourths of the sales volume to the South, 59 percent to the Northeast, and 65 percent to the Midwest (table 14).

"All other" carnation sources, nearly all local, supplied about one-fourth of the wholesalers' sales volume. Local carnation production was twice as important in the Northeast as it was in the Midwest and South.

Colorado, which accounted for well over one-fourth of the nation's sales value of production, supplied only one-twelfth of the carnations in the market studied (25). Of all selected crops, only with carnations was the role of a major producing State less important in the 13 markets than it was nationally. One-fifth of the carnation sales volume in the Midwest, only 3 percent in the Northeast and 5 percent in the South, and none in California were from Colorado. It was evident that, except for the West, the distance or availability of direct air transportation from Colorado influenced the position of the Colorado crop in the several markets.

Gladioli. Florida produced and shipped nearly 60 percent of the gladioli handled by merchants in this study, about the same proportion of national production it represents (25). Florida was the only substantial outside source of any of the selected crops in Western markets, where it supplied one-fifth of the gladioli needs. In all other regions, Florida was the source of about two-thirds of the sales volume of this crop.

"All other" gladioli sources supplied one-fourth of the sales volume. However, only about one-third of this portion was from other than local suppliers. Included in this group were the Carolinas and New Jersey supply areas when Florida was not producing.

One-sixth of the gladioli crop was grown in California. California was the most important source for the West but accounted for only about 10 percent of the gladioli handled in the Midwest and South. Indeed, among all survey markets outside of the West, California was a substantial supplier only to Dallas-Fort Worth.

Roses. Of all selected cut flowers, roses were most commonly acquired from nearby sources. "All other" sources, nearly seven-eighths local, provided 63 percent of the sales volume of this crop.

This proportion would have been even greater had it not been for the flowers from California. California is, of course, a "local" source for its own markets, but supplies from California were tabulated under that State and thus don't count in the local ("all other") tabulation. Except for the West, the Northeast was the most dependent on nearby sources for roses. Nearly 90 percent came to terminal markets from growing facilities in the same or adjacent States. This proportion was the same for all three markets in this region.

Table 14--Regional gross sales of selected perishables, by type of flower and origin of supply, 136 wholesale florists, 1970

Type of flower and origin	Northeast		Midwest		South		West		Total	
	1,000 dol.	Pct.	1,000 dol.	Pct.	1,000 dol.	Pct.	1,000 dol.	Pct.	1,000 dol.	Pct.
Carnations:										
California	4,127	59	3,736	63	2,324	75	2,069	100	12,256	68
Colorado	228	3	1,138	19	161	5	--	--	1,527	8
Florida	2	1/	--	--	--	--	--	--	2	1/
All others	2,685	38	1,032	18	593	20	--	--	4,310	24
Total	7,042	100	5,906	100	3,078	100	2,069	100	18,095	100
Gladioli:										
California	26	1	309	9	184	10	1,617	80	2,136	16
Colorado	--	--	47	1	--	--	--	--	47	1/
Florida	4,136	65	2,315	69	1,127	59	413	20	7,991	59
All others	2,165	34	703	21	589	31	--	--	3,457	25
Total	6,327	100	3,374	100	1,900	100	2,030	100	13,631	100
Roses:										
California	604	10	2,365	34	1,268	48	2,208	100	6,445	36
Colorado	--	--	29	1	72	3	--	--	101	1
Florida	23	1	--	--	--	--	--	--	23	1/
All others	5,536	89	4,551	65	1,291	49	--	--	11,378	63
Total	6,163	100	6,945	100	2,631	100	2,208	100	17,947	100
Chrysanthemums, standard:										
California	2,903	59	1,639	46	1,045	66	1,210	100	6,797	60
Colorado	--	--	36	1	--	--	--	--	36	1/
Florida	331	7	196	5	163	10	--	--	690	6
All others	1,688	34	1,702	48	389	24	--	--	3,779	34
Total	4,922	100	3,573	100	1,597	100	1,210	100	11,302	100
Chrysanthemums, pompon:										
California	1,451	21	1,237	34	571	37	580	99	3,839	30
Colorado	15	1/	--	--	--	--	--	--	15	1/
Florida	4,091	58	1,310	35	691	45	8	1	6,100	47
All others	1,495	21	1,149	31	285	18	--	--	2,929	23
Total	7,052	100	3,696	100	1,547	100	588	100	12,883	100
Chrysanthemums, potted:										
California	7	1	--	--	--	--	264	100	271	16
Colorado	--	--	--	--	--	--	--	--	--	--
Florida	254	37	--	--	42	8	--	--	296	18
All others	434	62	139	100	509	92	--	--	1,082	66
Total	695	100	139	100	551	100	264	100	1,649	100

-- means none of the 136 wholesalers fell within this category.
1/ Less than 0.5 percent.

About two-thirds of the Midwest's roses came from "all other" sources, nearly 70 percent from local growers. Nearly one-half of the roses in the South originated in "all other" sources, most of them from local sources. However, major differences between markets existed in that region. For example, no local roses were reported in the Atlanta and Dallas-Fort Worth markets, while Baltimore and Washington relied heavily on roses from local suppliers.

Standard Chrysanthemums. Sixty percent of the standard mums received by 136 wholesalers in 13 markets across the country were grown in California. However, California production is only 40 percent of U. S. total production (25). All standard chrysanthemums in Western markets were grown in California, as well as two-thirds of the supply in the South, 59 percent in the Northeast, and somewhat less than half in the Midwest.

One-third of the standard mums reportedly was received from "all other" sources. Eighty-five percent of the "all other" was local. The remainder was significant only in the Midwest, where Indiana was an important source.

Florida supplied 6 percent of the Nation's needs. While no region received more than 10 percent from that State, Baltimore reported more than one-fifth of its sales volume of standard mums as Florida products.

Pompon Chrysanthemums. With the exception of the West, which supplied virtually all of its own needs, Florida was the single most important State source of pompon chrysanthemums. It was the principal source in the Northeast, where it supplied nearly 60 percent of the market. The proportions in the South and Midwest were lower. Thus, there was not the clear inverse relationship between distance to market and share of market as was demonstrated with other flowers. In particular, the Northeast was the major regional outlet for Florida pompons, despite its longer distance from the production area.

California maintained 30 percent of the pompons, including those moved through terminal wholesale markets within its own boundaries, where it was essentially the sole supplier. Except for the Western region, the Midwest was the most dependent on local sources for pompons.

Potted Chrysanthemums. The sales volume of potted chrysanthemums handled by terminal-market wholesalers was small. It represented only about 7 percent of U. S. production and was substantially a local phenomenon (25)--that is, most potted chrysanthemums were obtained from local sources. Only Florida potted mums in some Northeastern and Southern markets and Canadian potted mums in New York were important exceptions.

Outlook

From the study, it was evident that the terminal-market wholesaler relied more on products from distant growers than he did in the past. This was especially true of the principal cut-flower crops. Potted crops were more resistant to this trend. Economic forces encouraging the abandonment of flower production near terminal markets will probably continue. To that extent, the remaining terminal-market wholesalers will procure increasingly large proportions of their cut-flower crops from entrepreneurs far beyond their own market areas as new production areas with economic advantages are identified.

For example, Latin American production has increased dramatically since data for this study were collected (1970). Latin America now represents a significant source of major crops for the U. S. market. Although unlikely to completely displace domestic production, such new sources inevitably will supply increasing quantities of cut flowers.

In contrast, potted crops are bulky and hence less capable than cut crops of absorbing costs of long-distance shipping. Advances in technology of packaging and shipping will tend to alter this situation, but potted crops probably will continue to be supplied to terminal-market wholesalers mostly by relatively nearby growers.

Basis of Acquisition

Consignment has been the most common method by which terminal-market wholesalers acquired floral crops (5, 13). Outright purchase of crops by these merchants for later resale once was insignificant in the older, established markets. However, by 1970, the consignment method accounted for only 58 percent of the total sales volume of perishables handled by wholesale florists (table 15). Even in the Northeast, which reported the highest rate of consignment handling, outright purchases of 30 percent represented a substantial increase over data reported in an earlier survey (13). The highest rate of outright purchasing by wholesalers was reported in the South. It was particularly high in Dallas-Fort Worth, where virtually no consignment selling was encountered. The West and Midwest reported about equal proportions of crops handled by the two methods.

Larger wholesalers tended to handle greater proportions of their crops on a consignment basis than did smaller wholesalers. This relationship prevailed in all regions but the Northeast, where the unique Boston situation (see p. 8) upset the usual. Except in the West, regions with high proportions of supplies from local growers evidenced high rates of commission sales. There was no difference in rate of usage of procurement methods according to type of crop.

Most wholesalers reported that they procured at least a part of their supply by outright purchase. Many of these noted that the amount of material so handled in their market had increased relative to the volume of commission supplies since 1965. They expected this proportion to be even higher by 1975.

The handling of crops by wholesalers on both a consignment and an outright purchase basis may work to the disadvantage of nearby growers. Crops from local growers, who tend to be small and sometimes less reliable in quality and quantity of product than distant suppliers, often are less desired in the market. Therefore, they do not attract the investment interest of wholesalers and usually are carried on a consignment basis. In cases where a wholesaler offers similar lots of the same crop, the local supplies usually on consignment and the distant supplies as outright purchases, the latter receives the merchant's favored attention.

The terminal-market wholesaler of the future may have to be willing to assume a more speculative position in order to ensure availability of product. The larger the distant grower-shipper, the greater will be his interest in a known

Table 15--Gross sales of perishables received under consignment and purchase supply agreements, by size of firm and by region, 136 wholesale florists, 1970

Region and firm size 1/	Consignment supplies		Purchased supplies		Total	
	1,000 dollars	Percent	1,000 dollars	Percent	1,000 dollars	Percent
Northeast:						
Small	3,754	75	1,232	25	4,986	100
Medium	9,008	65	4,949	35	13,957	100
Large	16,084	72	6,378	28	22,462	100
Total ...	28,846	70	12,559	30	41,405	100
Midwest:						
Small	290	28	744	72	1,034	100
Medium	3,465	45	4,241	55	7,706	100
Large	10,784	57	8,087	43	18,871	100
Total ...	14,539	53	13,072	47	27,611	100
South:						
Small	471	29	1,142	71	1,613	100
Medium	2,630	33	5,268	67	7,898	100
Large	2,536	55	2,047	45	4,583	100
Total ...	5,637	40	8,457	60	14,094	100
West:						
Small	630	31	1,417	69	2,047	100
Medium	555	33	1,145	67	1,700	100
Large	3,667	59	2,553	41	6,220	100
Total ...	4,852	49	5,115	51	9,967	100
U.S.:						
Small	5,145	53	4,535	47	9,680	100
Medium	15,658	50	15,603	50	31,261	100
Large	33,071	63	19,065	37	52,136	100
Total 2/.	53,874	58	39,203	42	93,077	100

1/ Firm size represents annual gross sales. Small firms are those reporting less than $400,000; medium are those reporting from $400,000 to less than $1 million; large are those reporting $1 million or more.

2/ Three firms did not respond.

price agreed upon before shipment. His willingness to accept a price determined in the wholesale market after shipment may disappear. The continuing trend toward outright purchasing will prove a greater test of wholesaler's business ability than has been the case under the consignment method. No longer will an assumed margin in the form of a sales commission be possible. Nevertheless, the shipper's certainty of a price and the wholesaler's certainty of desired quantities and qualities of flowers are the principal benefits which will perpetuate the current trend toward outright purchasing.

Transportation

Truck was the major mode of transportation by which floral crops were received in terminal wholesale markets. By value, trucks accounted for well over 60 percent of the selected perishables shipped to the 136 wholesalers (table 16). The remainder was shipped by air. The West received only 2 percent of its selected perishables by air since it was nearly self-sufficient within easy trucking distance.

The situations were greatly different in other regions, however. Nearly one-half of the selected perishables arrived by air in the Midwest and South. One-third of the Northeast's sales volume was shipped by air. In general, the use of trucks for shipping flowers was directly related to the proportion of local material in the market. Airfreight became a more practical means of transportation as mileage from production area to market increased and thus was of greater importance in those consuming areas more dependent on distant production.

Considering only those crops shipped from production areas beyond "local" boundaries, airfreight became far more important. Sixty-three percent of the crops received from nonlocal sources arrived by air, and only 37 percent by truck (table 17). These percentages are the reverse of the proportions noted above, which were based on receipts of all selected perishables regardless of origin.

The more remote the origin from the market, both in mileage and difficulty of terrain, the greater the proportion of crops shipped by air. Prime examples were California and Colorado crops shipped to distant markets. Ninety-seven percent of the combined receipts of crops from those two States was shipped by air.

Florida shippers, in greater proximity to markets than California, relied heavily on truck transportation. Eighty-five percent of the sales value of crops from that State reported in the 13 markets arrived by truck. Ease and economy of highway travel to the major markets accounted for this high percentage.

Some wholesalers registered concern about transportation problems. Long-distance trucks and local transfer trucks from airports often encountered severe difficulty in reaching wholesalers in some markets. Cost-increasing effects of traffic congestion as well as the sheer impossibility of trucks reaching unloading areas in the market at certain times of the day were basic to these concerns and were most prevalent in New York.

Table 16--Gross sales of selected perishables shipped by air and by truck, by region, 136 wholesale florists, 1970 1/

Region	Sales of supplies shipped by--				Total sales	
	Air		Truck 2/			
	1,000 dollars	Percent	1,000 dollars	Percent	1,000 dollars	Percent
Northeast	11,092	34	21,109	66	32,201	100
Midwest	11,354	48	12,279	52	23,633	100
South	5,479	48	5,825	52	11,304	100
West	178	2	8,191	98	8,369	100
U.S.	28,103	37	47,404	63	75,507	100

1/ Selected perishables are carnations, chrysanthemums, gladioli, and roses.
2/ All in-State (local) included as truck.

Wholesalers often complained about the cost and inconvenience of airfreight scheduling. Air arrival times frequently did not coincide with availability of clearance personnel at the airport or with the opening of the market day. Occasional lapses by airline and truck transfer personnel in proper handling of the shipments also caused problems. Nevertheless, no wholesalers saw these problems as sufficient to prevent increased use or at least the same use of air shipments in the future.

SELLING PRACTICES

Type of Customer

Retail Florists

Retail florists traditionally have been the principal customers of wholesale florists in the terminal markets (5, 9, 11, 13, 22). Results of this study indicated that the relative importance of retail florists has not changed (table 18). Wholesalers attributed 85 percent of their sales volume of perishables to retail florists. They averaged 185 active retail accounts and $560,000 in sales of perishables to retailers.

Some regional differences in sales to retail florists were found. Firms in the South were extremely reliant upon retail florists as a source of sales. Ninety-six percent of their sales of perishables was to retailers. Sales averaged $613,000 per wholesaler. Wholesale florists in the Western terminal markets derived the lowest proportion of sales from retail florists, attributing only 68 percent of their sales of perishables to retailers. Sales to retail florists in the Northeastern and Midwestern terminal markets were about the same as the average for all firms. Midwestern firms, however, accounted for the largest average sales volume to retail florists--$720,000 per wholesaler.

Table 17--Regional gross sales of selected perishables of distant origin, by supply source and transportation mode, 136 wholesale florists, 1970 1/

Supply source	Northeast's sales from--		Midwest's sales from--		South's sales from--		West's sales from--		U.S.'s sales from--	
	Air	Truck	Air	Truck	Air	Truck	Air	Truck	Air	Truck
	1,000 dollars									
California ...	9,118	15	9,074	212	5,009	384	--	--	23,201	611
Colorado	228	--	1,185	65	165	68	--	--	1,578	133
Florida	1,302	7,534	671	3,150	52	1,970	178	243	2,203	12,897
All other	444	763	424	1,743	253	280	--	--	1,121	2,786
Total	11,092	8,312	11,354	5,170	5,479	2,702	178	243	28,103	16,427
	Percent									
California ...	100	2/	98	2	93	7	--	--	97	3
Colorado	100	--	95	5	71	29	--	--	92	8
Florida	15	85	18	82	3	97	42	58	15	85
All other	37	63	20	80	47	53	--	--	29	71
Total	57	43	69	31	67	33	42	58	63	37

-- means none of the 136 wholesalers fell within the category.
1/ Consists of carnations, chrysanthemums, gladioli, and roses.
2/ Less than 0.5 percent.

The great majority of sales in all markets was made to retail florists located within 50 miles of the wholesaler's business location. Few firms were engaged in distribution throughout a wider area.

Other Wholesalers

The proportion of sales of floral crops to other wholesalers also has remained relatively unchanged over the years (1, 5, 13). Sales to other wholesalers--truck jobbers and merchant wholesalers in outlying or distant market areas--comprised the second most important source of sales (table 18). Such customers accounted for 11 percent of the sales of perishables for all firms.

Sales to other wholesalers were extremely important among firms in the West, accounting for 28 percent of their sales of perishables. A large portion of these sales was made to buyers in distant market areas. In contrast, terminal-market wholesalers in the South attributed only 1 percent of their sales of perishables to other wholesalers.

Other Retail Merchants

Flower sales to retail merchants other than retail florists reportedly have become more important during recent years (12, 14, 6). Data in this study refer to the business year ending in mid-1970 and, as a result, do not reflect any increase in this type of merchandising activity since then. Nevertheless, wholesale firms in the terminal markets did not appear to have participated substantially in the recent trend. Results of this study indicated that terminal-market wholesalers derived an average of 4 percent of their sales of perishables from nonflorist retail outlets (table 18). Although sales volume increases have been realized as a result of increased total sales, terminal-market wholesalers reported no greater sales volume proportionately from nonflorist retail sales than they did nearly two decades ago (13). With the exception of a few firms in the West, wholesalers indicated no definite plans for expanding sales in this segment of the industry. Wholesalers in the Los Angeles terminal market were particularly enthusiastic about sales in nonflorist retail outlets and were actively developing market strategies to capitalize upon the growing demand.

In general, terminal wholesalers were pursuing the same customer mix as in the past. If this pursuit continues, wholesale firms in the terminal markets probably will not have a major role in supplying demand for floral crops among nonflorist retailers. More likely, such demand, particularly for cut flowers, will be satisfied directly by firms in shipping-point markets (16).

Pricing Policies

Wholesale firms typically did not have comprehensive pricing policies based upon changing economic and market factors. Most wholesale firms appeared to operate on an inflexible markup policy without continual regard to changing supply-demand situations, seasonal flower prices, operational costs, or competitive forces in the market.

Table 18--Regional gross sales of perishables and nonperishables, by type and distance of customer, 136 wholesale florists, 1970

Type of customer and distance from wholesaler	Northeast		Midwest		South		West		U.S.	
	1,000 dol.	Pct.	1,000 dol.	Pct.	1,000 dol.	Pct.	1,000 dol.	Pct.	1,000 dol.	Pct.
Retail florists	34,385	84	20,880	88	13,491	96	7,434	68	76,190	85
50 miles or less ...	31,512	77	16,436	69	10,226	73	5,277	48	63,451	71
Over 50 miles	2,873	7	4,444	19	3,265	23	2,157	20	12,739	14
Nonflorists 1/	1,589	4	1,028	4	411	3	386	4	3,414	4
50 miles or less ...	1,589	4	588	2	411	3	316	3	2,874	3
Over 50 miles	--	--	470	2	--	--	70	1	540	1
Wholesale florists ...	5,104	12	1,725	8	192	1	3,046	28	10,067	11
50 miles or less ...	4,594	11	599	3	192	1	1,354	12	6,739	7
Over 50 miles	510	1	1,126	5	--	--	1,692	16	3,328	4
Total	41,078	100	23,633	100	14,094	100	10,866	100	89,671	100

-- means none of the 136 wholesalers fell within the category.
1/ Grocery store operators, department store operators, street vendors, and caterers.

The most important factor in price determination and markup policy was the price charged by other wholesalers in the market. Seventy percent of all wholesale firms reported that they followed such practices in price determination, without regard to product differentiation and services offered. Only 16 percent indicated that Market News reports were used in price determination.

Volume discounts were common among most wholesale firms. For example, fully 95 percent of the firms surveyed in the Northeast offered volume discounts. The West was the exception, with only 25 percent of the wholesalers doing so.

Pricing practices among wholesale firms were found to be relatively uniform by customer type. Terminal-market wholesalers typically did not differentiate markup policies between retail and wholesale customers. Similarly, they generally did not vary their markup by the type of flower purchased, although firms in the Northeast were exceptions.

The lack of differentiated, comprehensive pricing policies among wholesale firms in the terminal markets will probably have an influence on market development and market share of these firms in the future. Current policies may cause the wholesaler to further rely upon the retail florist as a source of sales, even though markets seem to be developing in the nonflorist retail sector. Terminal-market firms will have to develop more competitive pricing policies based on current economic and market-related information if they are to share the increased sales expected from the new sources of demand.

Credit Policies

Results of the study indicated that credit has continued to be a problem for wholesalers, who, like retail florists, traditionally have lax credit policies (9, 22).

Fully 90 percent of the gross sales of wholesalers in this study was made on credit, a level somewhat higher than in 1955 (22). Although virtually all firms extended credit to their customers, there was wide variation in policy. In a few market areas, wholesale firms extended credit to all customers on an equal basis. In other market areas, credit sales were made on a considerably more selective basis.

Larger firms tended to have somewhat more liberal credit policies. These policies were associated primarily with their more competitive business practices. Generally, larger firms had more aggressive sales policies and operated on a narrower gross profit margin. Sales volume seemed to be an important component in their market strategy. Emphasis on securing and holding large retail florist and nonflorist accounts was evident. Consequently, liberalized credit policies were used as a means of nonprice competition among the larger wholesale firms.

Interest-free credit was extended by many wholesalers. Although most of them extended credit for a period of only 30 days without interest, some reported 60- and 90-day credit without charge. The latter group admitted that the longer term credit probably was an unnecessary financial burden on the firm, but most seemed reluctant to alter the policy. Some feared losing business, and

a few considered credit costs a necessary part of doing business, regardless of the time period. These characteristics were relatively uniform throughout all markets, although the most rigid credit policies were exercised by wholesale firms in the South and West, where 70 percent of the firms charged interest on credit accounts after 30 days.

Many wholesalers established maximum dollar levels of credit for each customer and maximum time periods for which they would extend credit, regardless of interest charges. Generally, accounts were considered delinquent after 90 days, and no further credit was extended. Interest charges on past-due credit sales averaged slightly more than 1 percent per month. COD sales were usually the penalty for delinquent accounts. Only a few wholesalers indicated problems of default.

Few wholesalers who were highly dependent upon retail florists as a source of sales predicted any significant change in credit policies in the near future.

Terms of Sale

Although wholesalers have differing policies relating to terms of sale, delivery was considered a necessary part of the postsale service by virtually all firms. However, delivery policies varied significantly by region and market. Wholesalers in the Northeast, South, and West typically provided free delivery. Less than 10 percent of them assessed a delivery charge, regardless of the frequency of delivery or size of the order. In contrast, wholesalers in Midwestern markets generally did not include delivery as a part of the sale; 83 percent of the firms reported an added delivery charge on all orders.

Terminal-market wholesalers generally did not maintain maximum-trip, minimum-order delivery policies. Most firms made deliveries as requested, in addition to their scheduled deliveries. Consequently, the costs associated with delivery were excessive in many instances. This was especially apparent in the West and Northeast, where wholesalers generally made deliveries to customers as needed, sometimes making more than one delivery per day to the same customer. Most wholesalers in these regions admitted such practices were inefficient but believed that they were essential to a successful business in their market.

Wholesalers in the Southern and Midwestern terminal markets had made efforts to revise delivery policies during the 5 years preceding the study (1965-69). Over 90 percent of them maintained regular delivery schedules. Customers were encouraged to make purchases in accordance with these schedules. Wholesalers in Midwestern markets assessed a charge to discourage unscheduled deliveries and inefficient utilization of delivery vehicles. Wholesalers in the South did not generally charge for deliveries, but 90 percent of them had a policy of minimum sales for free delivery.

Return privileges were an important part of the sales terms. Nearly 70 percent of the firms in the Northeast, South, and West, but less than 50 percent in the Midwest, maintained a return policy for inferior quality produce and excess quantities ordered. Most wholesalers felt that this policy contributed to good customer relations. None of the wholesalers reported abuse of it.

Cash discounts for early payment were rarely given. Wholesalers in Northeastern markets were somewhat more inclined to offer discounts. However, less than half of them maintained such a policy. Most wholesalers reasoned that cash discounts were not important to their customers and that, in fact, few would pay cash even if such discounts were offered. They felt that retail florists were not in a position to take advantage of cash discounts on a regular basis. Wholesalers who were selling to nonflorist retailers and other wholesalers incorporated cash discounts into their sales terms more often but did not generally maintain this policy for all customers.

Quality differentiation has become increasingly important as part of wholesalers' terms of sale. Firms in the Northeast and South were most advanced in recognizing quality differences among their products and in developing pricing policies which reflected these differences. These wholesalers reported that such policies were beneficial to both the buyer and seller; most of the wholesalers intended to continue the policies.

Wholesalers in the West and Midwest were less inclined to differentiate prices on the basis of product quality. Only 55 percent of the Western firms and less than 50 percent of the Midwestern firms maintained such a policy.

Other Services

Advertising as a frequently performed service of terminal-market wholesalers has become more common during recent years. Most wholesalers support advertising programs on a national or regional basis through various trade associations. For example, approximately 70 percent of all wholesale firms participated in national advertising programs designed to benefit their customers through increased retail sales of flowers.

Somewhat less common among wholesalers was cooperative advertising in which both wholesalers and their customers financially support a localized ad campaign. This practice, reported by about 40 percent of the firms, took a relatively similar form throughout all regions. Most advertising was in the form of display and promotional materials, although some wholesalers did take part in media advertising for various groups of customers in their respective markets.

Rehandling and regrading were significant services provided by most terminal-market wholesalers except those in the West. Labeling and wrapping were equally important.

Wholesalers considered detailed billing and returns of flowers for customers and suppliers as valuable services. About half of the wholesalers claimed to provide the services. Firms in the Northeast and West followed the practice of detailed billing most extensively. Fewer than 10 percent of the Midwestern firms acknowledged detailed billing. Brokering, cooperative selling, and managerial information services were offered by a few of the firms surveyed but were not emphasized.

Although there has been no major change in the number and type of services offered, wholesalers generally agreed that customer services would probably become increasingly important in the future. Most firms were indefinite, however, as to which services might become more important.

MARKET ENTRY AND EXIT

Ease of entering or leaving an industry is an important element of market structure. To identify factors related to market entry, wholesalers were asked questions designed to indicate their perception of conditions bearing on ease or difficulty of market entry or exit.

The majority of responses clearly emphasized the discouraging aspects of starting and maintaining a flower wholesaling business. Well over one-half of the wholesalers cited no incentives to start a new wholesaling operation in their markets. The remainder pointed out that the opportunity for profits, the unmet demand for flowers at wholesale, the freedom and independence in having one's own business, or the sheer enjoyment of hard but satisfying work with such a product as flowers were reasons for entering a new business. No one point was listed by many respondents.

In contrast, nearly all wholesalers cited one or more conditions which they considered deterrents to new wholesaling businesses. The most important of these was the nature and timing of the work which they thought was necessarily a part of wholesaling. Specifically, wholesalers felt that the early and long hours and the hard physical work in the trade would dissuade potential entrants. Flower markets usually open for business in the early morning hours. Workers willing to tolerate such a schedule are vanishing.

One-fifth of the wholesalers noted the difficulty in hiring and retaining good help. They also felt the costs of retaining competent and reliable help were too high. Indeed, some wholesalers pointed out that, even with the granting of a higher wage rate, workers were difficult to find.

High capital requirements were considered important in preventing establishment of new wholesaling businesses. Credit practices of wholesalers led to the immobilizing of relatively large amounts of funds in the form of advances for retail customers. Thus, capital costs were higher than if the wholesaler had not served as a credit source.

A "low" rate of return was considered by some to be a significant factor in discouraging market entry. However, when wholesalers were asked to estimate the rate of return on sales they thought was realized by the "average wholesaler" in their market, they offered widely differing amounts. Estimates varied from a low of 1 percent to more than 20 percent. Most wholesalers estimated a rate of 3 percent or less (table 19). The next most often estimated range was 4 to 6 percent. The rest of the estimates were about evenly divided between 7-9 percent and 10 or more percent.

Proportionately more Northeastern wholesalers gave the highest return estimate. Most of them were operators of small businesses in Boston. Proportionately fewer Southern wholesalers offered estimates in the lowest category.

Table 19--Estimated rate of return on sales for "average wholesaler," by region, 136 wholesale florists, 1970

Rate of return on sales (percent)	Northeast	Midwest	South	West	Total
	Percent of firms				
3 or less	41	52	23	50	42
4 - 6	21	34	27	23	25
7 - 9	2	7	36	5	9
10 or more	17	--	5	5	9
No answer	19	7	9	18	15
Total	100	100	100	100	100

There were indications that the respondent's estimated rate of return was related to his size of business. Managers of larger firms tended to estimate lower rates of return than did those of smaller firms. The larger enterprises probably were more accustomed to lower rates of return since their sales bases were much larger and resulted in greater absolute dollar returns.

A final deterrent, mentioned by one-tenth of the wholesalers, was traffic and transportation problems. Particularly in the New York market, where most of these responses were encountered, wholesalers operating under conditions of difficult vehicle access noted that such conditions not only discouraged new entrants but also contributed to the closing of long-established businesses.

All of these negative circumstances combined to generate a noticeable pessimism among some terminal wholesalers. Situated as most are in the central city location, nearly two-thirds felt that there had been a trend (in business) away from the traditional (central city) terminal market. Although average size of wholesale florist businesses has increased, a decline in the number of such establishments from earlier levels confirms this observed trend (19). The proportionate decline has been greater in the Northeast than in the other regions, although significant differences between markets exist. The reason which respondents most often advanced for the declines was the flight to the suburbs of the consuming public, the retail outlets serving them, and, in turn, the wholesalers serving the retailers. They further noted big-city congestion and the costs and other problems the congestion created for wholesalers operating there.

Wholesalers predicted fewer terminal-market establishments in the future but expected those remaining to operate at higher dollar levels.

IMPLICATIONS FOR THE FUTURE

Terminal-market wholesaling is changing. The average volume of business conducted by terminal-market wholesalers is increasing, and the number of merchants in terminal markets is declining, although the drop is partly offset by new or relocated establishments outside the congested central city areas. Sometimes this decentralization takes the form of horizontal integration and is accomplished by establishing branch operations. This trend will continue as more merchants in congested terminal markets seek locations better suited to receiving and distributing large quantities of bulky goods.

Major shifts in procurement are taking place. The geographic origin of crops is changing. New production areas distant from established markets are expanding. Older, established production areas, usually near terminal markets, are being displaced. Modes of transportation also are changing in concert with these new production patterns. Truck and air shipments account for virtually all of the movement of crops to market. Truck is the major mode, but air becomes more feasible as distances to market increase. Finally, terminal-market wholesalers are handling proportionately fewer crops on consignment than in the past. Outright purchasing continues to increase in importance as both shipper and wholesaler realize the benefits of predetermined prices and quantities.

In most of these changes, the terminal-market wholesaler for flowers is much like wholesale merchants in other industries. He has accommodated, if not initiated, these alterations in industry conditions. He has exercised sound judgment and has modified his business accordingly.

In other areas, the study indicated an absence of change. This absence of change has inhibited progressiveness among wholesalers and is likely to contribute to the relative competitive disadvantage of terminal-market wholesale firms in the future. The main areas which have remained unchanged are: (a) Vertical integration of operations and (b) the customer type for which pricing policies and services have been developed.

The market-strengthening and cost-reducing effects of vertical integration are evident in other industries, but terminal-market wholesalers of flowers have not viewed these benefits as sufficiently compelling. Little evidence of increasing backward or forward vertical integration by these merchants exists. The vertical integration of wholesaling with growing or retailing which exists now is being carried out, not by wholesalers, but by growers and retailers. To this extent, the institution of the terminal-market wholesaler is bypassed. If the "mass sales" concept for flower retailing fully develops, however, wholesale firms without a major degree of control over production may find it difficult to maintain a steady supply of the desired quality of products. The absence of forward vertical integration by wholesalers, on the other hand, may have less effect on the relative competitive position of terminal-market firms in the future.

The terminal-market wholesaler also continues to rely on the retail florist as his principal customer. Wholesalers' product line and pricing, credit, and service policies and practices have been developed mainly with the retail

florist in mind. They are less effective in dealing with the new and more vigorous trade buyers such as nonflorist retailers.

Many large retailing concerns have established market strategies which center upon cash-and-carry, mass merchandising principals. These strategies necessitate cost, quality, and supply control at all levels. Because of the lack of competitive pricing practices by terminal wholesale firms, immediate benefits from these new marketing strategies in the retail segment cannot be expected. If these strategies become fully effective, such retail demands will probably be satisfied through flowers procured directly from shipping-point markets. While current wholesalers' services may assure continued traditional supplies and markets, these same practices tend to make it difficult for such firms to engage in extensive development of new market potentials resulting from nontraditional demand.

The neglect of this new mass market by the terminal-market wholesaler and his consequent reliance on the retail florist threaten to erode his traditional position of high importance in the distributive chain. Future increases in floral crop sales at retail probably will be proportionately greater in the relatively more elastic, nonevent-oriented segment of the market (10). Since this segment is the object more of the nonflorist retailer than of the retail florist who meets the emotion-based flower needs of consumers, terminal-market wholesalers are left as caterers to the part of the market which may record the smallest sales gains in the future--the traditional market.

LITERATURE CITED

(1) Berninger, L. M.
An Economic Analysis of the Wisconsin Floriculture Industry with Special Reference to the Wholesale Commission Firms. Wis. Univ., Madison, Agr. Econ. Bul. 35, 32 pp., June 1963

(2) Deloach, D. B.
The Cut Flower Industry: An Analysis of its Growth Potential. Calif. Agr. Expt. Sta., Giannini Found., Agr. Econ., Mimeo Rpt. 214, 43 pp., Jan. 1956

(3) Daykin, Leonard E.
Flowers Bloom as a New Profit Category. Progressive Grocer 36-50, Feb. 1972.

(4) Fossum, Truman M.
Flower Wholesaling Trends. U.S. Agr. Mktg. Serv., Mktg. Activ. 17(1): 5-7, Jan. 1954.

(5) Goodrich, D.C., and Jarvesoo, E.
Marketing Floricultural Products in the Northeast, Part II, Wholesalers. Cornell Univ., Ithaca, N.Y., Agr. Expt. Sta., Bul. 978, 31 pp., June 1963.

(6) Goodrich, D.C.
Changes in Structure of the United States Market for Flowers. Invited Paper, XVIII International Horticultural Congress, Tel Aviv, Israel, 1970.

(7) Goodrich, D.C., and Whitaker, D.B.
Structure and Organization of Selected Terminal Wholesale Markets in the Northeast. Cornell Univ., Ithaca, N.Y., Agr. Exp. Sta., Agr. Econ. Res. 340, 39 pp. Jan. 1972.

(8) Hall, Richard
Organization and Practices of Selected Terminal Wholesale Flower Markets in the West. U.S. Dept. of Agr., Mktg. Res. Rpt. 960, 19 pp., June 1972.

(9) Havas, Nick
A Graphic View of the Retail Florist Industry: Marketing and Management Practices. U.S. Dept. Agr., Mktg. Res. Rpt. 788, 48 pp., April 1967.

(10) Jarvesoo, Elmar
The U.S. as an Import Market for Floricultural Products. International Society for Horticultural Science at Montpellier, France, Sept. 1970.

(11) Jarvesoo, Elmar
A Decade of Change in Wholesale Flower Markets in Massachusetts. Jour. Amer. Soc. Hort. Sci., Vol. 94, July, 1970.

(12) Kelly, R.A.
Floricultural Sales in Mass Market Outlets. Ill. Agr. Expt. Sta., Bul. 675, 44 pp., Aug. 1961.

(13) Moore, E.J.
Wholesaling Floral Commodities in the Chicago and New York City Markets. U.S. Dept. Agr., Mktg. Res. Rpt. 175, 32 pp., June 1957.

(14) Poesch, Gus
What's the Marketing Future for Sellers of Florist Crops? Florist Review, p. 30, 44-46, Dec. 30, 1970

(15) Powell, J.V., Raleigh, S.M., and Lundquist, D.M.
Horticultural Specialty Crops--Production and Marketing Trends, 1948-65, U.S. Dept. Agr., Statis. Bul. 422, 72 pp., Apr. 1968.

(16) Powell, J.V., Hall, Richard, and Raleigh, S.M.
Shipping Point Markets for Flowers--Practices and Problems of California and Florida Shippers. U.S. Dept. Agr., Mktg. Res. Rpt. 972, 37 pp., August 1972.

(17) Raleigh, S.M.
Organization and Practices of Selected Terminal Wholesale Flower Markets in the South. U.S. Dept. Agr., Mktg. Res. Rpt. 951., 24 pp., May 1972.

(18) Sullivan, G.H., and Carpenter, W.G.
An Analysis of the Merchandising Structure of the Retail Floriculture Industry. Jour. Amer. Soc. Hort. Sci., Vol. 93, 1968.

(19) Sullivan, G.H., and Carpenter, W.G.
An Evaluation of Seasonal Sales Patterns of Retail Florists. Jour. Amer. Soc. Hort. Sci. 94(6): 626-629, Nov. 1969.

(20) Sullivan, G.H., and Robertson, J.L.
Organization and Practices in Midwestern Terminal Wholesale Markets for Flowers. Purdue Univ., Res. Bul, 886, 16 pp., May 1972.

(21) Taylor, E.G., Utter, R.L., and Lowstuter, A.B.
Wholesale Florist Facilities for Boston. U.S. Dept. Agr., Mktg. Res. Rpt. 570, 40 pp., Dec. 1962.

(22) Trotter, W.K.
Problems in Marketing Florist Crops. Cornell Univ., Ithaca, Agr. Expt. Sta., A.E. 983, 207 pp., June, 1955.

(23) U.S. Bureau of the Census. U. S. Census of Agriculture, Volume 1, Area Reports, 1969.

(24) U. S. Bureau of the Census. U.S. Census of Agriculture, Volume V Special Report, Part I, Horticultural Specialties, 1959.

(25) U.S. Department of Agriculture. Flower and Foliage Plants. SRS SpCr 6-1(72), April 1972.

(26) Williams, F.W.
Characteristics of the Wholesale Flower Industry in Georgia. Geo. Agr. Res. Rpt. 6(13, No. 1), 1971.