

A Review of Roadside Marketing Literature

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FOREWORD

This publication is an attempt to organize and present the major findings of farm retail or "roadside" marketing studies. In some instances an attempt is made to summarize and interpret the findings to the reader. In other cases the findings are reported verbatim. No detailed summary of this bulletin will be made. The table of contents lists the major areas believed to be pertinent and on which research reports have been made. The dearth of information in areas such as operating costs and net returns should encourage additional study in such areas of operation.

Farm retail marketing of produce has been recognized as an important marketing area for many years. The two earliest studies found were published in Ohio, one in 1929 by Charles Hauck and another by Hauck and Herschler in 1933. The 1933 study, "Roadside Marketing of Agricultural Products by Ohio Farmers," summarized records of farm sales operations for the 1927-32 seasons. "Almost none" of these roadside stands had started prior to 1915 and three-fourths started after 1921.

Although the awareness of the roadside marketing industry has apparently increased since the early 1930's there is no satisfactory indication of total sales value or the percentage of total farm marketings made in this manner. Successive studies in Ohio indicated that this method of sale declined between the early 1930's and the early 1950's. However, there is some evidence that there has been a slight increase since 1950.

The typical farm roadside market is a part-time operation and is open only seasonally. Some sell only a few dollars worth of produce with primitive retail facilities or none, while others have as much space as a supermarket and have a dollar sales volume to match. No clear-cut blue print for success was apparent from these studies.

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A REVIEW OF ROADSIDE MARKETING LITERATURE

Introduction

Ohio offers many opportunities for direct retail selling of farm products, particularly of fruits and vegetables. The production of fruits and vegetables is concentrated, to a large degree, in and around heavily populated areas. Excellent highways crisscross the state making it easy for people in the urban areas, as well as tourists, to take advantage of opportunities to buy produce at the farm.

Smith and Cravens emphasized the importance of direct retail selling in a study (22)¹ conducted in 1960-1961 with the following statement: "A highly diversified system of distribution of perishables is essential today. Most producers prefer to specialize in production and find it more efficient to use wholesale marketing channels rather than selling directly to consumers. In spite of this, modern merchandising has not entirely replaced direct marketing especially by producers in heavily populated areas. In fact, many forms of direct marketing by producers to consumers are being practiced today. For the fruit and vegetable industry this practice can be considered only as supplement to, rather than a replacement for, other methods of marketing. However, for individual producers it may be possible to replace wholesale with direct retail marketing by altering the farm organization.

In Ohio a large part of the fruit and vegetable crops near heavily populated areas are grown on farms of small acreages having high per acre land values. Because of the small acreage, the operator and family members are often not fully employed. Under these conditions producers have frequently found it desirable to increase the size of their businesses by taking on added marketing functions rather than by obtaining increased

¹See list of publications on roadside marketing for complete title of publications, see pages 95-96.

acreage. A great deal more labor and management is required for direct retail marketing than for wholesale marketing. However, the decision as to whether or not it would be profitable for a grower to perform these added marketing functions depends upon his individual capabilities and those of his family as well as on the availability of other means of increasing business volume and on their alternative employment opportunities.

The perishable nature of many fresh fruits and vegetables is another important reason for the feasibility of direct selling. The quality and value of produce deteriorate rapidly. Direct marketing lends an advantage to growers who strive to get high quality, ripened-to-perfection produce into the hands of the consumer. The growing popularity of early morning harvest, and of the retail sale of sweet corn on the same day it is picked, exemplify the consumers' desire for quality and the producers' willingness to adjust his practices to provide a quality product. Consumers have indicated in many studies that they desire and are willing to pay for fresh produce of good quality when they can identify it as such. Also in the minds of an undetermined number of consumers, the merchandising image of farm-fresh, locally-grown produce bought directly from a 'genuine' farmer is favorable to direct sales."

METHODS OF FARMER RETAIL SELLING

There are several methods by which farmers may sell directly to consumers at retail. The method used depends on several factors such as: type and quantity of product produced, location of the farm, labor available, number of other producers in the area, capabilities and wishes of the farmer, and several other factors.

Farmers' Markets

One of the few retail farmers' markets still in successful operation is the East Cleveland Farmers' Market. Most such markets have either disappeared or the market stalls have become operated by non-farmers.

That the farmers' retail market is not the solution for all growers who desire to sell at retail is indicated by the following statement of Wann, and Cake, (26): "Selling at this type of market is neither practical nor convenient for some growers, especially those who live at a great distance from such markets and those who operate large farms. On the other hand many farmers, especially those selling at retail, have found that by selling at this type of market they can secure a larger proportion of the consumer's dollar. Frequently this means higher net returns to the grower, even though he considers his selling time as a marketing cost."

Retail Routes in Urban Areas

Retail routes in cities or towns, often referred to as peddling, is another method of direct selling of produce sometimes employed by farmers. This method of direct retail sales has been on the decline in recent years due to the time required in selling, the increase in automobiles and the improvement of highways, and the restrictive ordinances of municipalities. However, some producers still sell at retail some of their products at the door of the consumer on established routes at regular intervals. No figures are available on this method of direct selling; however, it is safe to assume that only a very small percentage is disposed of in this manner.

Pick-it-Yourself

This method of direct retail selling has been gaining in popularity among growers of fruit in recent years. The pick-it-yourself method is best suited to small and medium size farms located fairly close to urban areas. Small fruits, such as strawberries and raspberries, are especially adaptable to this plan. However, tree fruits, such as apples and peaches, have been successfully marketed in this manner.

Dalrymple (11), in a study of growers' experiences with pick-it-yourself made the following observations, "Pick-it-yourself undoubtedly will not work for all growers.

It requires an individual who has a facility for working directly with the public. He needs a knack for publicity and promotion, and a willingness to put in some unusual hours on weekends and evenings when much of the business occurs.

Growers have noted that enthusiastic customers have shown a cheerful tendency to pick all the fruit they find in front of them even though the better fruit may have been spot picked before their arrival. As one grower puts it, 'there is never any complaint as to grade or quality of the produce, it's all fancy to them because they have the chance to pick what they want'. The fact that the fruit is taken home immediately means that there is little deterioration."

Dalrymple also states that growers using the pick-it-yourself method have generally adopted the following practices:

1. Advertise fairly extensively and in some instances they mark the way to the farm.
2. Request that pickers bring their own baskets, but just in case they don't, have some for sale.
3. Usually supply stepladders.
4. Usually carry some form of liability insurance.
5. Orchards or beds to be picked are easily accessible by car.
6. Small fruit growers provide ample parking space near beds.

Vending Booths and Self Serve Stands

When there is only a single product to sell such as eggs or honey, a vending booth beside the highway is often the most practical method. By the use of such booths or stands the customers can help themselves and leave the money. The need for an attendant is thus eliminated.

Roadside and Farm Markets

With the rapid improvement in highways, and the tremendous increase in automobiles, roadside marketing has become the predominant method of direct farmer retail selling

of farm products. Through the years as marketing costs have increased and the farmer's share of the consumer's dollar spent for food has decreased many producers have resorted to roadside marketing as a means of obtaining a larger share of the consumer's food dollar. Wallace, in a study of roadside marketing in Rhode Island (25), puts it this way: "Producers operating roadside stands are finding it more profitable to sell direct to consumers, by-passing the wholesalers and retailers, thus receiving a higher return for their produce. This method of direct selling allows the producer to absorb the marketing costs and margins normally taken by the middlemen."

While the usual terminology for direct selling on the farm is "roadside marketing" much of the farmer retail sale is made at the packinghouse or farm storage which is located away from the road. This farm sale method of selling has become the major outlet for many growers in Ohio. Even in locations 25 to 30 miles from the city and away from major highways some growers have developed a large market for their produce through this type of sale.

Whippen (27), adds further emphasis, "Many farm families for years have sold farm produce at retail from tables or steps of farm buildings. Some have erected special buildings from which to display and sell fruits and vegetables to consumers. Selling at the roadside has been a method used by these families to get maximum returns from things they raise or make.

Retail sales at the farm usually return more net income per unit sold than can be obtained through wholesale channels. Transportation costs are less for the farmer if he sells at retail at home; the customer does the traveling. The farmer does not have to pay the middleman's commission and less expensive containers can be used. Moreover, the farmer has a chance to sell his services as a stand attendant along with his produce."

According to Whippen (27), the roadside selling development is closely related to the following points:

1. The customer's desire for fresh products.
2. His desire to buy produce at a reasonable cost.
3. The ability of the consumer to travel.
4. The appreciation of a rural set-up.
5. The hospitality of the stand operators.

Since roadside marketing is the most prevalent method of direct selling today this publication is devoted primarily to bringing together available information on this method. A more detailed discussion of the findings to date follows.

LOCATION

Distance From City or Town

Most farmers are unable to choose a perfect location for the roadside market because it usually has to be on the road fronting or near his farm. However, the distance from the nearest city or town may have an effect on the volume of business. Most studies have shown that the nearer the market is to the urban area the larger the resulting volume. The study conducted by Kohls, et al (17) in Indiana emphasizes this (Table 1).

Table 1. Distance From City of 5,000 Population or More and the Characteristics of 175 Indiana Roadside Markets, 1949.

Distance from City (miles)	Percent of Markets	Average Annual Sales	Weeks Open	Average Weekly Sales
0 - 2.9	18	\$ 6,319	26	\$ 219
3.0 - 5.9	27	3,160	19	164
6.0 - 11.9	31	3,338	19	172
12.0 - 18.0	24	2,521	15	194

Generally, roadside markets are located near towns or cities because of the volume of traffic and accessibility to the city customer. A study conducted by Brown (7) in South Carolina of 78 roadside markets showed that two-thirds of the markets were located within five miles of the nearest town (Table 2).

Table 2. Location of 78 Roadside Markets Relative to the Nearest Town, by Type of Market, South Carolina, 1956

Distance from Nearest Town (miles)	Type of Market			All Types	
	Permanent (Number)	Temporary (Number)	House (No.)	(Number)	(Percent)
Less than 1	3	3	1	7	9.0
1 - 4.9	29	5	9	43	55.1
5 - 9.9	17	3	4	24	30.8
10 or more	1	2	1	4	5.1
Average Distance and Percent	3.9	4.5	4.2	4.0	100.0
Number of Markets	50	13	15	78	---

Type of Highway or Road

A heavily traveled road or highway is important to the success of a roadside market. Many studies have shown the importance of locating the market on a well-traveled road where it will attract many customers. In a study made by Tadejewski in Vermont (23) a close association was found between the number of vehicles passing the market and the average volume of sales (Table 3).

The Indiana study by Kohls, et al (17) revealed that approximately 80 percent of the markets were located on either national or state highways (Table 4). Also it was found that markets located on county roads operated over a longer period and their annual and weekly sales were smaller than those of the markets located on national or state highways.

Table 3. Relation of Traffic Count to Total Sales and Average Monthly Sales, Vermont, 1949

Traffic Count Group	Markets	Average* Traffic Count	Months Open	Average Total Sales	Average Mo. Sales
400 - 1600	52	1,171	5.8	\$1,708	\$294
1601 - 2499	45	2,054	7.8	2,755	353
2500 - 4500	48	3,062	6.5	4,054	624
Average	145	2,092	6.7	2,839	424

*Approximate number of vehicles using the road during a 24-hour period in the month of August; taken from traffic count census maps, Department of Highways, Montpelier, Vt.

Table 4. Type of Roads and Characteristics of 175 Indiana Roadside Markets, 1949

Type of Roads	Percent of Markets	Weeks Open	Average Weekly Sales
National Highways	34	18	\$194
State Highways	46	18	187
County Roads	20	23	159

Roadside market studies made in New York by Bond (5) showed that the traffic count for a 12-hour day in August varied from 300 to more than 10,000 cars a day. When the roadside markets included in the study were arranged into three groups according to the traffic count, the total and average weekly sales for the group having the highest traffic count were higher than the group having the lowest traffic count (Table 5). However, it should be noted that markets in the groups having the higher traffic count stayed open longer, and had a higher investment per stand.

Table 5. Relation of Traffic Count to Total Sales and Other Factors (425 stands, 1931, 1932, 1933, and 1937)

Traffic-count groups	Stands (Number)	Average* Traffic Count (No.)	Weeks Open (No.)	Average Value of Stand (\$)	Average Total Sales (\$)	Average Weekly Sales (\$)
Lower Third	138	1,308	16.5	158	1,769	107
Middle Third	147	2,804	22.5	236	2,303	102
Upper Third	140	5,965	23.5	319	3,128	133
Average All Stands	425	3,358	20.5	240	2,405	117

*The approximate number of vehicles using the road during a 12-hour daylight period, in the month of August; taken from traffic census maps, State of New York Department of Public Works, Division of Highways, Albany, New York.

Other Considerations of Location

The right side of the road leading toward town has been found to be the most desirable. In the study made by Kohls, et al (17) the market operators felt that customers from the inbound traffic to a city made larger purchases. Many reported that a very low percentage of their business was from motorists traveling on the opposite side of the road. As the traffic decreased there seemed to be less advantage attached to one side over the other.

A straight stretch of road has been found to be a more desirable location than on a curve. However, if locating on a curve, the outside of the curve has advantages over the inside.

Studies have proven that locating on a level stretch of road is to be preferred over locating on a hill. Motorists often object to stopping at a roadside market while going up or down a hill. In hilly country the top of a hill where the market can be seen from a distance is quite advantageous. Prospective customers, even regular ones, need time to see what is for sale, and will often take note of the display and the appearance of the market before deciding to stop.

Visibility is a most important factor to consider when choosing the market site. Obstructions, such as trees, buildings, sign bears, telephone poles and embankments, that obstruct the view are most objectionable. Such obstructions of course cause the prospective customer to pass the market before seeing it.

A location next to an orchard, garden, sweet corn field, or other market crops gives the impression of fresh farm produce. In the Indiana study (17) the majority of the market operators reported that customers preferred to trade at markets located on the production site. They stated that many customers believed such markets carried high-quality, home-grown produce. This especially applied to the transient trade. Some customers even returned to the market because they were interested in observing the grading or other operations performed by the farmer operator.

The study by Kohls, et al (17) also revealed that there was a marked tendency for markets to locate near one another. These markets also had a larger average weekly business (Table 6). The authors state further, "Though such a situation probably fostered a more competitive situation between markets, it also probably attracted greater traffic and potential customers into the general area. The potential customer had more than one source to choose from and was probably more likely to become a satisfied customer. Such a tendency to group near competitors exists in almost all phases of the retail trade."

Table 6. Distance From Other Markets and Average Weekly Sales of 85 Indiana Roadside Markets, 1949

Distance From Other Markets		Percent of Markets	Average Weekly Sales	Percent of Business
Range (miles)	Average (miles)			
0 - 0.9	.4	44	\$183	43
1.0 - 1.9	1.1	15	177	23
2.0 and over	4.3	41	158	34

When selecting a site for the roadside market on the home farm, consideration should be given the distance from the house. It is not always convenient or feasible to have a sales person present at the market. If the market is close enough to the house, the prospective customer can blow his horn or otherwise signal his presence. Some markets make use of a buzzer to signal the attendant. Furthermore, water and electricity are valuable assets to a market and these utilities can be more easily provided.

PHYSICAL FACILITIES

Type of Sales Facility

A neat attractive market will often mean added sales. Various studies have shown that different types, shapes, sizes and colors are successfully used. In most studies roadside markets are divided into three to six classifications as follows: 1. Permanent, 2. Semi-permanent, 3. Temporary, 4. Sales from a table, 5. Sales from home, 6. Sales from the packing house or storage. The type of facility used is not always indicative of the volume of business.

In the Vermont study (23) the markets were classified as: (a) Permanent-consisting of a permanent building open the year round, (b) Semi-permanent-open during the warm months with a permanent structure of simple construction, (c) Temporary-a table or bench beside the road for periodic sales of seasonal products, and (d) Sales from the home with a sign out front. In the study it was found that the semi-permanent was the largest group and had the largest total sales (Table 7). However, the permanent markets had the highest average sales.

In the Indiana study (17) the roadside markets were classified as permanent, semi-permanent, and temporary. The permanent market had a permanent building and had a year-round supply of agricultural products for sale. These markets were

Table 7. Relation of Type of Market to Total Sales, Vermont, 1949

Type of Market	No. of Markets	Percent of Markets	Total Business	Average Sales	Percent of Business
Permanent	2	1	\$32,200	\$16,100	8
Semi-Permanent	58	40	279,815	4,824	68
Temporary	43	30	56,855	1,322	14
Home Market	42	29	40,535	965	10
Total	145	100	\$409,405	\$2,823	100

relatively few in number, but proportionately did a much larger share of the business (Table 8). The semi-permanent market had a permanent building but was open only part of the year. This type of market made up almost two thirds of the total markets and did over two thirds of the total business. The temporary market consisted of a table, bench, or display rack and was frequently operated only on week-ends and holidays. Their average annual sales and percent of the total business were relatively small.

Table 8. Characteristics of 175 Indiana Roadside Markets by Type of Market, 1949

Type of Market	Percent of Markets	Average Annual Sales	Percent of Business	Average Weeks Open During Year
Permanent	5	\$14,813	19	51
Semi-permanent	64	3,930	69	18
Temporary	31	1,354	12	12
Total or Average	100	\$ 3,618	100	20

Bond (5) found in studies of roadside markets in New York that many operators were making large sales with a small investment in the building. Also that good display tables served well where abundant shade was available. Some market operators had converted the end of a shed or some other building for roadside marketing purposes by using the building for sorting and packing, and displaying the produce under a shed near the highway. Bond also found that the roadside markets with permanent stands which remained open longer and had average total sales for the season more than double that of the temporary stands.

Scott and Leed in a study of Ohio roadside markets (21) classified the markets in four groups or types:

Type 1 - Markets with permanent or more or less substantial buildings. These markets made up 30 percent of the total.

Type 2 - Markets having a temporary or portable shelter. Approximately 5 percent of the total markets were in this group.

Type 3 - Markets having no buildings or shelter but had displays of goods which were visible from the highway. This group represented 19 percent of the total.

Type 4 - Farm sales outlets having no buildings or displays along the highway. Using signs only to attract customers. This group made up 46 percent of all markets.

Size of the Market

Roadside markets vary in size from a table or rack beside the road to elaborate permanent structures. A market does not necessarily have to be large or elaborate to be successful. A neat, attractive structure is a basic requirement. Customers often associate cluttered surroundings, rubbish, and lack of paint with poor quality.

Hauck in writing about roadside marketing in New Jersey (15) states, "The size of the stand, type of construction, and facilities and equipment will depend on the scale of operation planned. A number of successful markets have grading and packing

facilities connected with the stand. Most successful markets start small and expand as business grows."

Bond (5) in the New York study found that the investment in roadside market buildings varied greatly. Approximately one-third of the operators valued their stands at about \$10 with weekly sales of about \$67 for a four month period. Another third reported an average value of \$62 per stand with average weekly sales of \$112, operating for about five months. The third group, with the largest investment per stand, placed the average value at \$524 per stand with average weekly sales of \$175 over a six to seven months period.

Bond concluded that, "An inexpensive stand or a well constructed display table is satisfactory for those who plan to sell seasonal produce such as fruit or melons, or handle a limited volume for a short period. A covered stand or enclosed market with storage space and protection from the weather is needed for those who handle a larger volume of perishables such as vegetables over a longer period of time."

Donaldson and Johnstone (12) writing about roadside marketing states, "Establishment of a roadside market should require only a small initial outlay of capital. Some of the most successful markets began in a simple, inexpensive way. Vegetables, berries, flowers, and poultry products are items which provide a quick turnover for your investment. An inexpensive simple stand can be made as attractive to customers as the more elaborate, costly type of construction.

Be wary of heavy investment in buildings and equipment to start your business. Every successful roadside market man whom we have interviewed strongly expressed these feelings: 'Start small', they say; 'first prove the need for a market, and then you can anticipate its possibilities. Expand as your business grows'."

In a study of 50 roadside markets in South Carolina made by Brown (7) the smallest size permanent market structure in use was 6 by 8 feet, while the largest was 30 by 40 feet. Most markets contained less than 200 square feet of floor space. Twenty-eight of the structures had wooden floors, and 17 had earth floors. Some of the

earth floors were covered with shavings. Five of the markets had concrete floors. Wood construction was used entirely in 43 of the markets, two were pole-type structures, three concrete block, one had a wood frame covered with wire, and one was built of wood slabs. Out-of-pocket construction costs of the markets are shown in Table 9.

Table 9. Construction Cost of 50 Permanent Roadside Market Structures, South Carolina, 1956.

Cost of Construction (Dollars)	Number of Markets
Less than 50	5
50 - 99	10
100 - 199	9
200 - 499	13
400 - 999	5
1,000 and over	8
Total	50

Approaches and Drives

A most important consideration in any roadside market facility is the entrance to the market from the highway. Approaches should be long and wide for easy access, and free of ruts or holes.

Bull (8) in making suggestions for successful roadside selling says this, "The more convenient it is to stop, the more attraction the market has. Locations where motorists can get off the pavement and on to a safe shoulder as they slow down have an extra advantage. Avoid sites where culverts and guard rails near the market make it difficult for drivers to slow down before turning in."

Parking Space

Many studies have shown that ample parking facilities are of prime importance to successful roadside marketing. With supermarkets this is a must. The amount of parking space required depends to a large extent on the volume of business or the anticipated volume. Shade is a definite asset to any parking area. It provides comfort for

the customers, especially those waiting in the car while purchases are made, and protection for the produce on display.

Scott and Leed (21) in a study of Ohio roadside markets found that many roadside market operators had not given sufficient consideration to parking facilities. Parking space at many markets was severely limited and in some cases provided a traffic hazard.

In a study of 78 South Carolina markets (7) Brown found that the parking space at various markets ranged from 2 to about 50 cars (Table 10). Generally, parking space varied with the type of market. Fifty-five of the markets had a dirt surface, twenty had surfaces of stone, cinders, or coral, and three had macadam (black top) surfaces.

Table 10. Parking Facilities of 78 Roadside Markets by Type of Market, South Carolina, 1956.

Capacity (No. of Cars)	Markets Reporting By Type			All Types
	Permanent	Temporary	House	
Less than 5	5	3	12	20
5 - 9	16	4	1	21
10 - 14	11	4	--	15
15 - 19	8	1	--	9
20 - 24	5	--	1	6
25 and more	5	1	1	7
Total	50	13	15	78

The relation of the size of the parking space to sales is indicated in the Vermont study (23). The markets in Vermont having less parking space had a small volume of business (Table 11), while those with larger parking facilities had a larger sales volume.

Table 11. Relation of Parking Space to Total Sales, Vermont, 1949

Parking Space Available No. of cars	Average	Number of Markets	Total Sales	Average Annual Sales
No space	0	67	\$59,053	\$ 881
1 - 6	4	29	50,929	1,756
7 - 12	10	26	92,805	3,569
13 - 18	16	13	59,823	4,602
19 or over	24	10	146,795	14,680

In the Indiana study (17) the authors stated that, "Many Indiana markets were established with little or no provision for parking space. Forty percent of the markets had parking areas for less than five cars. The majority of these markets considered their parking space to be inadequate. Three-fifths of the surveyed markets had space to park five or more cars. Most of these operators thought their parking provisions about right.

The larger parking lots were associated with larger average weekly sales (Table 12). This, of course, does not mean all that is necessary to run a successful market is to have a large parking lot. However, operators felt that easy access to a market with safe parking provisions did encourage potential customers to stop. They felt that the presence of a few cars parked at a market often helped to influence a driver to stop."

Table 12. Parking Capacity and Characteristics of 85 Indiana Roadside Markets, 1949

Parking Capacity		Percent of Markets	Average Weekly Sales	Percent of Total Business
Range	Average			
0 - 4	3	40	\$ 91	16
5 - 9	7	39	188	31
10 and over	14	21	307	53

Bull (8) states that, "Parked cars around the market suggest that it is a good place to stop. Have the parking area adjacent to the building so that it will be clear that other motorists have stopped to do business with you.

Provide approximately 15 parking spaces for each 100 cars of prospective buyers that you would expect in one day on a week-end. A standard parking lot is a bay about 60 feet wide. Twenty feet should be allowed for parking on each side, leaving the remaining 20 feet for turning. Make the parking bay as deep as necessary with a minimum of 8 feet allowed for each car along the sides."

Dust control of the parking area and drives should be considered in the plan for any roadside market. Perhaps the best method of controlling dust is hard-surfacing the drives and parking area. Chemicals such as calcium chloride and petroleum oils are often used in keeping down dust.

Display Space

Motts (19) says, "Your display is your last chance to make passing customers stop. The larger the display the greater impact it has. A display shows what is available and creates confidence on the part of new customers."

In the Ohio study (21) it was found that display space in many markets was very limited. Average size of display space ranged from 16.2 square feet to 58.4 square feet (Table 13).

The size of the display space should be based on the volume of business or expected volume. Most studies suggest that the front and sides of the market are mostly used for display. Shelves may be erected along the sides for displaying products not requiring too much shade. On the front a counter that slopes toward the road will provide the best view for the passing customer. Some stand operators use hinged windows which can be dropped from the top of the stand to provide a display counter or raised from the bottom to shade the produce during the sales day.

Table 13. Frequency Distribution of Display Space at Types 1, 2, and 3, Roadside Markets, Ohio, 1950

Square Feet of Display Space	Type of Market				Square Feet of Display Space	Type of Market	
	1		2			3	
	Number	Percent	Number	Percent	Number	Percent	
0 - 15	3	8.1	4	36.4	1 - 5	14	36.0
16 - 30	8	21.6	5	45.4	6 - 10	11	28.2
31 - 45	7	18.9	1	9.1	11 - 15	2	5.1
46 - 60	9	24.4	0	0	16 - 20	5	12.8
61 - 75	3	8.1	0	0	21 - 25	0	0
76 and over	7	18.9	1	9.1	26 - 30	2	5.1
					31 and over	5	12.8
Total	37	100.0	11	100.0		39	100.0

With such an arrangement the stand can be used as a storage area at night. Sloping top display tables can be placed in front or on the sides of the stand to attract customers. It might also be noted that many operators consider shade over the display of highly perishable produce to be most important.

Refrigeration of Display and Storage

The consumers buy at roadside stands because they expect to obtain produce of the best quality. They associate farm freshness and tree ripened or vine ripened produce with quality. Due to improved handling methods and better refrigeration, we find the supermarkets selling better quality produce each year. This means that if the roadside market operator wants to keep customers coming to his market, he must offer superior quality produce. The keeping of fruits and vegetables fresh is a problem with the roadside market operator as well as with the supermarket. In the past many roadside market operators have partially solved this problem by harvesting at frequent intervals. Most fresh vegetables and many fruits lose freshness very rapidly after harvest, especially in hot weather if they are not kept cool. A partial answer to this is refrigeration. While many roadside markets have been successful in the past without refrigeration, it will be harder in the future to compete with the supermarket without some form of refrigeration. The answer to this could be ice, refrigerated cases or walk-in coolers depending on the size of the market. Studies indicate that many roadside markets are today using one or more of these methods to maintain produce quality over longer periods. Table 14 shows the most desirable temperature for fruits and vegetables on display.

Refrigeration is a desirable asset for maintaining top quality of highly perishable fruits and vegetables. Both ice and mechanical refrigeration can be used effectively in roadside market operations. A cooling room helps to keep perishable products fresher. Mechanically refrigerated storage coolers are being used in many roadside markets. Walk-in type coolers are available in sections that can be easily expanded as volume of business increases. Many small stands even find it profitable to use

Table 14. Refrigeration Requirements of Fruits and Vegetables on Display*

Retail Refrigeration Highly Desirable (35° - 45° F.)	Retail Refrigeration Desirable	Retail Refrigeration Not Required (But Usually Beneficial If Space is Available)	Retail Refrigeration Not Desirable
Asparagus	Apricots	Apples	Avocados
Beans, snap	Beets, topped	Cabbage	Bananas
Beans, lima	Cantaloupes	Cucumbers	Sweet Potatoes
Berries	(ripe)	Grapefruit	Tomatoes, pink
Broccoli	Carrots, topped	Lemons	(Non-ripe tomatoes below 50° may not ripen if refrigerat
Brussel Sprouts	Celery	Onions, Dry	
Cauliflower	Cherries	Oranges	
Kale	Grapes	Parsnips	
Lettuce	Okra	Potatoes, white	
Mushrooms	Peaches, ripe	Rutabagas	
Onions, green	Pears, ripe	Turnips, topped	
Peas	Peppers	Watermelons	
Radishes	Plums		
Spinach	Rhubarb		
Sweet Corn	Squash, summer		
Tangerines	Tomatoes, ripe		

* This table was prepared to indicate degree of perishability. In markets without refrigerated display space, night storage in a produce cold room or cooler is desirable for the items (except berries) in the two columns on the left.

Prepared by the Quality Maintenance and Improvement Section, Biological Science Branch of the United States Department of Agriculture, Beltsville, Maryland, May 1954.

refrigeration of some sort to maintain better quality over time. Reduced spoilage losses and fewer marked down prices will often pay for the investment in refrigeration.

Donaldson and Johnstone (12) emphasize the value of proper storage facilities with the following statement, "Many customers patronize roadside markets because they believe the products are fresher than they could get elsewhere. Unfortunately, they are too often disappointed. Lack of proper storage has resulted in many farm products reaching the consumer in an unsatisfactory condition.

Some operators have found that a refrigerated holding room not only keeps perishable products fresh but actually increases sales. Need for refrigerated

storage space will depend on the products sold, operating methods and volume of sales. The size of the holding room will also depend upon the period of time the products are to be stored. Holding rooms of small capacities are being used successfully by many vegetable growers. Fruits, vegetables, meats, poultry, eggs and other products can be held for short periods in this type of storage, and overnight storage has saved many a product from rapid deterioration. A constant temperature of about 40 degrees Fahrenheit is recommended for such a storage."

Other Facilities and Equipment

There are several other facilities that have a bearing on the success of a roadside market operation. Among these are facilities for grading, washing, and packing; electricity, running water, heat, restrooms, storage room for supplies, telephone, cash register, scales, adding machine, drinking fountain, chairs or benches, and record keeping books. The South Carolina study (7) lists the following equipment (Table 15) found in 63 roadside markets of that state.

Table 15. Equipment Used in 63 Roadside Markets By Type of Market, South Carolina, 1956.

Equipment	Markets Reporting by Type ^{1/}		
	Permanent	Temporary	Totals
Tables or display shelves	50	13	63
Electric lights	25	2	27
Weighing devices	22	4	26
Soft drink box, ice box, some produce	21	-	21
Glass show cases	11	2	13
Trimming tables	7	-	7
Toilets (indoor)	4	-	4
(outdoor)	2	-	2
Cash registers	3	-	3
Display bins	3	-	3
Telephone	1	-	1
Grading machine	1	-	1
Ice cream box	1	-	1
Adding machine	1	-	1
Sink	1	-	1

^{1/} Not including "house" markets.

Regarding the equipment for preparation of produce for display, Donaldson and Johnstone (12) make the following statement and suggestions, "If your operation is too small to justify the expense of mechanical grading equipment, we suggest that a place be set aside in a back room or shed for the preparation of produce for display. Trimming and washing of vegetables, for example, will make them attractive to your consumers, and the better prices they will command will more than repay you for the work involved. Beets, carrots, and potatoes in a dirty or muddy condition are unattractive and do not command the price of clean, fresh-looking produce.

For efficient operation we suggest that your preparation room be equipped with the following:

1. A deep laundry tub for soaking the dirt from vegetables is a must!
2. A permanently attached 15-foot length of hose makes it possible to hose down items on the draining boards, fill a sprinkling can or tub, and clean up the trimming area.
3. Wide draining boards on two or three sides of the tub make it easy to hose down or drain wet produce. They should be tipped so as to carry water into the tub and make a handy shelf to put trimmed produce on.
4. A draining shelf mounted over the tub takes up little space and gives extra room for baskets of produce to drain.
5. A tool rack, conveniently placed, will make it easy to find needed equipment. Make the rack big enough to hold the trimming knives, a crate opener, a box of rubber bands, a hand brush, mop, shovel and broom. Have a place for everything and keep everything in its place!
6. A floor stand and floor drain help prevent accidents, make footing secure and carry away excess water."

A list of suggestions by Cole of Massachusetts (9) for successful roadside selling include the following:

1. Floors, steps, and runways need to be safe and easy on high heels.
2. Paint needs to be fresh looking. Price stands usually have gaudy colors; quality stands, conservative colors.
3. Attractive landscaping is extremely helpful to create a quick impression of good quality. Poor quality is frequently advertised by cluttered yards, rubbish, and old paint. Cleanliness is essential in all things.
4. Storage for produce, supplies and produce put up and ready for sale makes for convenient, orderly stands.
5. Heat is convenient for help and protection to produce in late fall and winter in closed stands.
6. Ample light for easy reading, easy inspection of produce, and advertising an open stand is profitable.
7. Convenient facilities for help, for cleaning the stand, washing display racks are helpful. Hot as well as cold water is desirable for stands open in late fall and winter.
8. Toilet facilities are necessary for the help in all closed stands, where several people are employed. Public toilets, particularly if clean, are an attraction and particularly if stands are located at the end of a long drive.

OPERATING PRACTICES AND POLICIES

It is likely that people often do not really know why they shop where they do. The reasons are many and complex and change in importance for each person. They also differ from one person to another. In fact, what influences one to buy may actually repel another. It is the retailers task to interpret these customer desires in such a way that he can obtain the maximum net profit on sales of his products.

Many factors are completely under the control of the retail seller, others partially so and still others hardly at all. In the East Cleveland Farmers' Market study (22) an attempt was made to get customer reaction to the relative importance of a list of factors related to fresh produce and to the operation of the market. Their ratings suggest the greater importance of freshness, cleanliness, and quality considerations and the lesser importance of price, parking facilities, savings stamps, etc., (Table 16). To some extent this rating could be misleading. Good parking facilities are now so universal that the customer expects and accepts this as normal. Price is of secondary importance only in relative terms. Display is one means of emphasizing quality, etc. In other words, sales can be lost by a sufficiently unfavorable reaction to the factors at the bottom of the list just as they can be encouraged through a favorable reaction to the factors at the top of the list. The market operators task is one of achieving a working balance of these and other factors that is desirable to a maximum number of customers.

"Quality" versus "Price" Markets

It is generally felt that most customers stop at roadside markets because they want good quality produce. However, there are some who look for bargains only. It is often difficult for any one stand operator to meet the needs of all types of customers.

Table 16. Reported Importance of Selected Factors in Fresh Fruit and Vegetable Purchases, 184 Respondents, June 1959, East Cleveland, Ohio

Factor	Importance*				Group Rating**
	Extremely Important	Fairly Important	Of Little Importance	Of No Importance	
	Number	Number	Number	Number	
Freshness	178	6	-	-	1.03
Cleanliness	174	10	-	-	1.05
Quality	162	20	1	-	1.12
Flavor	148	35	1	-	1.20
Appearance	144	37	3	-	1.23
Selection of merchandise	127	48	8	1	1.36
Odor	127	41	13	3	1.41
Convenience	122	49	12	1	1.41
Friendliness	116	50	13	5	1.49
Bulk fruits and vegetables	109	49	20	6	1.58
Color	98	63	19	3	1.60
Price	109	43	24	7	1.61
Adequate parking space	111	30	11	32	1.80
Display appeal	65	73	32	13	1.95
Prepackaged	24	49	74	37	2.67
Advertising	28	42	56	57	2.78
Saving stamps	21	34	43	85	3.49

*The housewife was asked to rate each factor as to its importance when purchasing fresh fruits and vegetables.

**The following value was given the ratings in order to determine group ratings: 1.-extremely important, 2.-fairly important, 3.-of little importance, and 4.-of no importance.

Cole (9) classified roadside stands as being either "price" or "quality" operations, and choosing the right kind of stand is one of the most important decisions that the operator should first consider.

An operator may decide to emphasize low price or high quality. It is not often that he can have both--low price and high quality. "Price" stands usually have lower quality. They frequently have a high proportion of purchased items, many different kinds of items, and so often appear to feature low quality produce that it is hard to tell them from the familiar "junk" stands on the edges of many cities. "Price" stands should be, and usually are, located on a well-traveled road, and have big price signs.

A "quality" stand usually offers high quality produce and accordingly has higher prices. The operator who decides on high quality cannot be easily matched. Roadside markets handling many purchased items, particularly unrelated to home grown produce, or having soft drink signs, and other similar advertisements, are usually low quality stands. Appearance may be deceiving but people classify a stand by its appearance. Once a stand has the reputation of low price and low quality it is very hard to change it.

Tadejewski (23) found in a study of 145 roadside markets in Vermont that there was a close relationship between quality and sales volume. His conclusions regarding this were, "Sales volume depends on satisfied customers as well as on a large volume of customers. The consumers at roadside markets want products of the desired quality at a reasonable price. It is the repeat business built up by customers' reliance on this type of service that makes for a long-term success. Buyers usually express their dissatisfaction by failure to return at frequent intervals. Based upon the opinions of the 145 operators, quality, freshness, courtesy, reasonable prices, attractive market and display, and a convenient parking space are ways to keep a customer satisfied and thus induce him to return for additional purchases.

Most buyers at roadside markets expect one of two conditions. They either expect a higher quality product at regular retail prices, or products of equal quality at bargain prices. When one or the other conditions is discovered, repeat business is developed."

Actually, market operators reported that nearly two out of every three dollars they received were from repeat customers (Table 17). Roadside markets with the largest total sales had the largest percentage of repeat customers. Nearly two-thirds of the markets reported that one-half or less of their business was with repeat customers. The average yearly sales at these markets were \$1,362 compared with \$5,341 at markets that had two-thirds of their business with repeat customers.

Table 17. Relation of Repeat Business to Sales, 141 Vermont Roadside Markets, 1949

Percent repeat	Number of markets	Average total business	Average repeat business	Average percent repeat business
0 - 25	7	\$ 789	\$ 178	23
26 - 50	81	1,412	616	44
51 - 75	38	6,196	3,893	63
76 -100	15	3,179	2,724	86
Average	141	\$2,894	\$1,853	64

Seasons of Operation

For most roadside markets the period of operation is limited to a few months each year, usually not more than six. They usually open in the late spring or early summer and continue through the fall and early winter. Discontinuance of operation is mainly due to cold weather, and unwillingness of customers to drive out for roadside buying. Also the types of products handled, the availability of labor, and the relationship of the market to the rest of the farm business usually determines the dates of opening and closing. The opening date may be early in the spring if flowers and nursery products are sold. Stands handling apples, cider, pears, Christmas trees, etc., sometimes remain open during the late fall and winter. Stands handling poultry and eggs are often open all year.

In most studies it was found that July, August and September were the most important sales months. However, it was found in the Ohio study (21) that 65 percent of the Type 4 markets remained open throughout the year (Table 18). This was probably due to the fact that many offered poultry and eggs for sale.

Only 12 of the 78 South Carolina markets (7) were open year-round. Five of these were permanent markets and seven were markets where sales were made from the

Table 18. Months During which Roadside Markets Operated, by Type of Market, Ohio, 1950

Month of Operation	Percent of Markets			
	Type 1	Type 2	Type 3	Type 4
January	13.51	9.09	10.26	65.63
February	13.51	9.09	10.26	65.63
March	13.51	9.09	7.69	65.63
April	13.51	18.18	7.69	65.63
May	27.03	27.27	10.26	65.63
June	62.16	72.73	35.90	71.88
July	91.89	100.00	82.05	87.50
August	97.30	100.00	94.87	93.75
September	97.30	100.00	56.41	87.50
October	51.35	36.36	25.64	75.00
November	18.92	18.18	10.26	65.63
December	18.92	9.09	10.26	65.63
All Year	10.81	9.09	7.69	65.63

home (Table 19). Four of the five permanent markets handled a variety of products, while one sold only flowers and plants. The seven house markets sold only one or two products each such as: eggs and chickens, eggs and flowers, flowers and plants, eggs, honey, shrubbery.

Table 19. Length of Selling Season for 78 Farmer Roadside Markets, South Carolina, 1956

Selling Season (Months)	Number of Markets	Percent of Markets	Typical Season
1	1	1.3	June
2	14	18.0	July-August
3	15	19.2	June-August
4	27	34.6	June-September
5	4	5.1	June-October
6	4	5.1	July-December
8	1	1.3	May-December
12	12	15.4	Year-round
Total	78	100.0	

About 7.3 percent of the 315 roadside markets in the New York study (5) were operated throughout the year. Almost all of the produce sold at stands operating less than four months each year was grown on the farm, whereas a larger proportion was purchased from other growers at markets operating over a longer period. Of the markets studied the ones selling mainly fruits were open for an average of about 19 weeks, whereas vegetable markets were open for 22 weeks. Those handling poultry and dairy products were open for a still longer period. The largest number of stands were operating in July, August, and September. More than 60 percent of the stands were operating in June and October, and about 30 percent of them in May and November. A study of roadside markets in Delaware by Gabriel (14) revealed that many stands in that state operated only a short time during the year. These sold mainly strawberries and cantaloupes. Most of these stands used a table display. However, the permanent and semi-permanent stands tended to remain open much longer; 13 were open year-round (Table 20).

Table 20. Number of Stands Which Kept Open Various Periods of Time, Delaware, 1936

Time Kept Open	Number of Stands
All Year	13
8 Months	2
7 Months	2
6 Months	3
5 Months	1
3 Months	1

In New Hampshire (27) Whippen found 26 stands that remained open the year-round. Of the remaining 139 stands, 95 or 68.2 percent opened in May, June, or July; 110 or 79 percent closed in October, November, or December (Table 21). The period of operation ranged from 4 to 52 weeks, with an average of 43 weeks for the 165 stands.

Table 21. Period the Stands were Open for Business,
New Hampshire, 1957

Period of Operation	Number of Stands
4 to 15 weeks	42
15 to 25 weeks	58
25 to 30 weeks	22
30 to 40 weeks	14
40 to 48 weeks	3
48 to 52 weeks	26

In the Vermont study (23) the operators were asked to designate the best three sales months. Thirty percent named September as the most important month; 55 percent August and September; and 89 percent June through October. Markets that were not open year-round usually started selling in May or June. The majority closed in October, but there were many which ended the season in September, November, and December.

A large volume of sales was made in June during the strawberry season. During August more vegetables such as corn and tomatoes were sold. In October the majority of the markets handled apples, squash, maple syrup, and other fall farm products. The relationship of total sales to number of months open is shown in Table 22.

Table 22. Relation of Sales to the Number of
Months Opened, Vermont, 1949

Months Opened	Number of Markets	Percent of Markets	Total Business	Percent of Business
Less than 4	22	15	\$ 20,274	5
4 to 6	76	52	290,645	71
More than 6	47*	33	98,486	24
Total	145	100	\$409,405	100

*Includes two permanent markets which did 25 percent of the business transacted by the markets open more than six months.

Market operators in Indiana (17) stressed the importance of regularity of operation in promoting repeat sales which they felt were very essential to the ultimate success of the business. After the market was open for the season, it appeared to be advantageous to the operator to operate it on a regular schedule. About 81 percent of sales were by markets having regular operating days and hours. According to 39 percent of the operators, August was the best sales month. October was next. July through October included the best sales months for 88 percent of the market operators.

Many of the Indiana markets opened the season just before July 4 and closed after Labor Day. This enabled them to obtain the large sales on the big holidays and to include the best part of the selling season.

Best Business Hours and Days

The roadside marketing business is largely a late afternoon and early evening, and a weekend business. Following the pattern of supermarkets, most of the business at roadside markets is done during the last part of the week and Sundays. Holidays are the exception. The best business hours are late afternoon and early evening. However, the various studies showed that opening and closing hours varied widely. Some markets opened early in the morning and remained open until well after dark. Others opened late in the morning or in the afternoon, and closed on or before dark. On weekends and holidays when traffic was heavy and sales correspondingly good, hours of operation were increased to do more business. Weather had a definite effect on sales during any day or season. Cold or rainy weather retarded sales; warm, clear weather tended to increase sales. Many of the markets were open for long hours each sale day.

Smith and Cravens (22) found in the study of the East Cleveland Farmers' Market that the usual number of hours spent selling varied between 7 and 12 hours for each Monday, Wednesday, and Saturday. The market was not open during other days. Saturday was the preferred shopping day for 42.6 percent of the customers

followed by 35.8 percent for Wednesday. Afternoons and evenings were preferred for Monday and Wednesday while Saturday mornings were preferred (Table 23).

Table 23. Market Day Shopped, East Cleveland Farmers' Market Customers June 16, 18, and 21, 1959

Day	Number of Families	
	Number	Percent
Once a week		
Monday	346	14.6
Wednesday	846	35.8
Saturday	1,006	42.6
Total	2,198	93.0
Combination of Days		
Monday-Wednesday	39	1.7
Monday-Saturday	33	1.4
Wednesday-Saturday	80	3.4
Monday-Wednesday-Saturday*	13	0.5
Total	165	7.0
Grand Total	2,363	100.0

*These were the days the market was open.

The best business hours were in the late afternoon as found in the South Carolina study by Brown (7). Over one-half of the market operators reported that between 4 and 6 p.m. were the best two business hours during the day. Nearly three-fourths reported that the best four business hours were between 3 and 7 p.m.

The three best business days reported by market operators were Friday, Saturday, and Sunday (Table 24). From the choices reported by the market operators, it would appear that Sunday was the best business day of all. However, eleven of the markets did not open on Sunday and daily gross sales figures for 22 markets which were open 7 days each week indicate that Saturday was the best business day. It accounted for about one-fourth of the total weekly sales of these 22 markets.

Table 24. The Best, Second Best, and Third Best Business Day for Roadside Markets, South Carolina, 1956

Day of the Week	Number of Markets Reporting		
	Best Day	Second Best	Third Best
Monday	7	6	6
Tuesday	-	2	2
Wednesday	1	3	3
Thursday	4	1	9
Friday	10	14	15
Saturday	16	28	3
Sunday	23	5	8
Total	61	59	46

The earliest that any of the South Carolina markets opened was 6 a.m., and the latest any closed was 11 p.m. (Table 25). About 75 percent of the markets opened between 7 and 8 a.m. and about 60 percent closed between 7 and 8 p.m. It was found that 83 percent of the markets were open between 10 and 13 hours each day during the operating season.

Table 25. Number of Hours Daily, 78 Roadside Markets Were Open for Business, South Carolina, 1956

Open Daily Hours	Markets Reporting	
	Number	Percent
9	1	1.3
10	13	16.7
11	15	19.2
12	21	26.9
13	16	20.5
14	4	5.1
15	7	9.0
16	1	1.3
Total	78	100.0

The New Hampshire study (27) reported that "The pattern of daily sales in roadside markets closely followed that of the retail grocery stores. Of the 165 stands, an average of 39.4 percent of the total weekly sales were made during the first four days of the week and 60.6 percent during the last three days (Friday, Saturday,

and Sunday). On farm stands and salesrooms 38.4 percent of the weekly sales occurred during the first four days and 61.6 percent the last three days. On commercial stands the sales were more evenly divided with 44.2 percent occurring during the first four days and 55.8 percent the last three days."

The best business hours for roadside markets in Indiana (17) were in the late afternoon and evening. Between 3 and 4 p.m. was the best hour as reported by 42 percent of the operators, and 91 percent named the hours 3 to 6 p.m.

The majority of the Indiana markets were open between 11 and 13 hours daily. The most common practice was an 8 a.m. to 8 p.m. operation. Night operation was uncommon. Over four-fifths of the markets were open before noon. Some markets opened early in the morning to serve a special trade which proved to be profitable near cities and resorts.

Saturday and Sunday were the best sales days as reported by the Indiana operators. These days accounted for 51 percent of the week's sales. Friday through Sunday sales accounted for two-thirds of the week's business. Operators in Indiana also reported that, "Special conditions caused sales on any one day of the week to vary greatly from what was expected ordinarily. Temperature and weather conditions greatly influenced sales. Rainy or cold weather materially reduced the volume of sales. Some operators used weather forecasts in predicting the demand and the supply needed for the next day. Operators reported that sales on holidays and days preceding or following holidays were unusually large."

In another roadside marketing study conducted by Brown and Chapman (6), in South Carolina it was found that the best business hours, as measured by both the number of customers and the number of containers sold, were in the late afternoon between about 3 and 7 p.m. Although these hours accounted for only about one-third of the time that the market was open, (an experimental market setup to sell peaches was used in the study) in 1956, 48 percent of the customers made their purchases during these hours. In 1957 the figure was 36 percent for the

same hours. It was also noted that the average purchase of peaches (by volume) per customer was generally larger in the early morning and late afternoon hours. The distribution of sales on weekends was not significantly different from that during weekdays.

In 1957 the proportion of persons stopping who purchased was less between 5 and 6 p.m. when only 3 out of 4 made a purchase. The largest proportion of those stopping who bought came between 3 and 4 p.m. when 24 out of every 25 who stopped made purchases. The authors (Brown and Chapman) attributed the large percentage of non-purchasers among those stopping during the five o'clock hour to one or more of three reasons: (1) Inability to receive prompt service due to the rush of customers, (2) a goodly number of travelers who stopped out of curiosity, because of the number of vehicles present, and/or (3) customers on their way home from work stopped to price peaches without having any intention of buying.

Roadside market operators interviewed in the Vermont study (23) were asked to name the three best business days of the week. Seventy-nine percent named Sunday and Saturday as the best days, while 98 percent selected Friday through Monday.

The operators of 12 semi-permanent markets in Vermont were asked to estimate the percentage of business transacted each day of the week. These 12 markets were open an average of 23.9 weeks with gross receipts of \$5,228 or \$436 per week. Of this total, \$1803, or 35 percent, was done on Sunday, while 76 percent was transacted on Saturday through Monday.

The Vermont markets varied considerably in the number of hours they were open each day. Seventy-six percent were open from 10 to 12 hours a day. Ninety-seven percent were open 9 hours or longer each day. Almost one-half of the operators named 4 to 6 p.m. as the best business hours, and 96 percent named 3 to 8 p.m. Most markets did not find it profitable to open before 10 a.m. and most closed by dark.

In Ohio (21) it was found that more than 70 percent of the markets were open 7 days a week (Table 26). However, no information was obtained on best business hours and days. All the Type 1 markets reported Sunday sales, but 9 percent of the Type 2, 19 percent of the Type 3, and 11 percent of the Type 4 markets were closed on Sunday.

Table 26. Proportion of Different Types of Markets Open Varying Lengths of Time During the Week, Ohio, 1950

Days Open During the Week	Percent of Markets			
	Type 1	Type 2	Type 3	Type 4
7	94.74	72.73	71.43	74.29
6	5.26	---	21.43	17.14
5	---	9.09	---	---
4	---	9.09	---	---
3	---	---	2.38	---
Irregular	---	9.09	4.76	8.57

Information was obtained on the closing hours of the permanent (Type 1) markets in Ohio. A relatively large proportion of the operators of these markets reported that they stayed open late in order to offer their products to motorists who were driving around during the late afternoon or early evening (Table 27). Approximately 55 percent of the operators reported that they remained open for business until 9 p.m. or later. About 29 percent reported irregular hours of operation.

Table 27. Proportion of Type 1 Markets Closing at Different Hours, Ohio, 1950

Closing Hour, P.M.	Percent of Markets
7	2.63
8	13.16
9	23.68
10	26.32
11	2.63
12	2.63
Irregular	28.95
	<u>100.00</u>

Operating Costs-Labor Utilization

Very little information on operating costs was available from the various studies of roadside marketing. Where costs were broken down labor was the biggest item. Operating costs varied with the type of market and with kind of produce offered for sale.

The Indiana study (17) indicated that the operating expenses of 29 Indiana markets averaged \$1,834 per market (Table 28). This was 32 percent of the annual sales. This study showed that the smaller the market the larger the operating costs in relation to the sales. The unpaid labor supplied by the operator or some member of his family was valued at \$692 per market which was 12 percent of annual sales. Adding this to the 51 cents gross return for farm produce, the operator and his family received 63 cents out of each sales dollar for his farm produce and time of his family used in operating the market. A proportionate breakdown of the operating costs of the 29 markets is shown in Figure 1. The largest single item of expense was labor.

Table 28. Operating Costs of 29 Indiana Roadside Markets
1949

Costs and Receipts	Dollars	Percent of Annual Sales
Average Total Sales	5,647	100
Operating Costs:		
Total Labor*	1,274	22
Containers	245	4
Building and Equipment	51	1
Electricity and Telephone	55	1
Advertising	116	2
Insurance	38	1
Miscellaneous**	55	1
Total Operating Costs	1,834	32
Cost of Produce Purchased for Resale	941	17
Total Operating and Produce Costs	2,775	49
Gross Return for Farm Produce	2,872	51

* Includes \$582 hired and \$692 family labor

** Includes fuel, rent, taxes, etc.

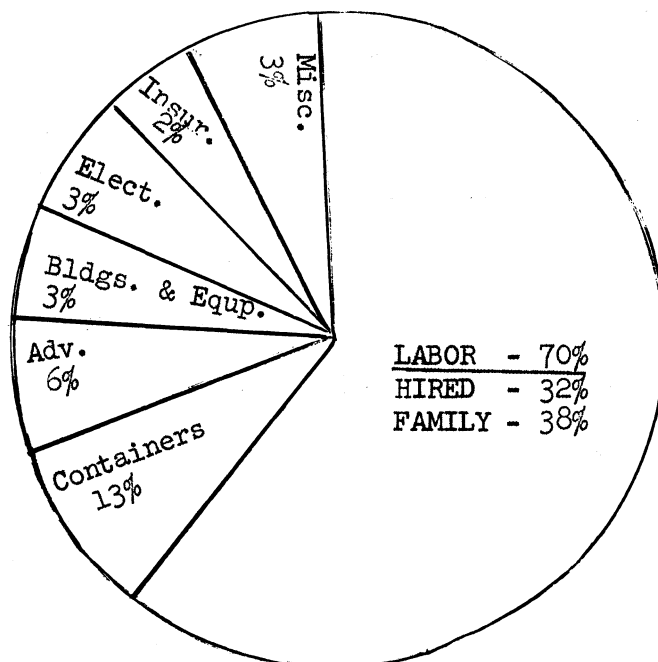


Figure 1. Various Operating Costs as Proportion of Total Operating Costs, 29 Indiana Roadside Markets, 1949.

The Indiana roadside markets were operated largely with family labor (Table 29). Only 9 percent of the 85 markets employed hired labor. Farmers reported that it was often difficult to pay the price efficient labor could command.

Table 29. Distribution of Family and Hired Labor, 85 Indiana Roadside Markets, 1949

Personnel	Percent of All Labor Used	Personnel	Percent of All Labor Used
<u>Family:</u>		<u>Hired:</u>	
Men	33	Men	10
Women	48	Women	6
Children	2	Children	1
Total Family	83	Total Hired	17

In describing the utilization of labor at the Indiana roadside markets the authors stated, "Sixty percent of the markets visited were attempting to serve their customers by providing an attendant from the nearby farm house. As the annual sales increased, the percentage of total labor performed by the family decreased and the

percentage performed by hired labor increased. About 96 percent of the total labor was furnished by the family in markets with less than \$2,000 annual sales; this decreased to 57 percent for markets with annual sales of \$4,000 or more. Markets having larger annual sales used more labor performed by men. Men were also the most important source of hired labor.

Thirty-six market operators supplied complete estimates as to the amount and value of labor used in their markets. An average of 1,765 hours of labor valued at \$1,350 for an average of \$0.77 per hour was utilized per market. Family help was considered by operators to be more valuable than hired help.

At a few markets, personnel was employed on a commission basis. This commission ranged from 10 to 30 percent of the gross sales. Operators using this method reported that they preferred it to a straight hourly wage plan because sales personnel took more interest in promoting sales."

One of the South Carolina studies (7) revealed a total of 120 workers employed in the 78 markets. Of these workers, 65 worked on a full-time basis and 55 on a part-time basis. Most all of the "house" markets utilized only part-time workers while most permanent markets were being run by one or more full-time workers. The farm operator and his family furnished most of the labor in operating the markets. (Table 30).

Table 30. Labor Utilized in 78 Roadside Markets, South Carolina, 1956

Type of Labor	Persons Employed		Totals Number
	Family Labor	Other Labor	
	Number	Number	
Men	38	9	47
Women	42	2	44
Children	<u>26</u>	<u>3</u>	<u>29</u>
Totals	106	14	120

Of the market workers 39 percent were men and they accounted for 42 percent of the total hours worked. Thirty-seven percent of the labor force was women which accounted for 36 percent of the hours worked. Children made up 24 percent of the labor and put in 20 percent of the total labor hours.

Twelve of the South Carolina markets were operated entirely by hired employees. Average weekly sales in these 12 markets was reported at \$154.20 and the average weekly labor costs at \$24.25. This averaged 15.7 percent of gross sales, with a range from 4 to 29 percent of gross sales.

In the study using the experimental roadside market for selling peaches in South Carolina, (6) costs were figured on the basis of bushels of peaches. In 1956 a total of 1,457.3 bushels of peaches were sold during the 5-week (7 day week) operating period. The average selling price was \$4.13 per bushel. Marketing costs per bushel were: field labor 41.1 cents; market labor 33.0 cents; container 25 cents; advertising, depreciation, transportation, interest on investment 2.7 cents. Total marketing expenses amounted to \$1.02 per bushel providing a net return of \$3.11 (\$4.13 - \$1.02) per bushel. This amounted to 75.2 cents return out of each sales dollar for fruit. It was estimated that the value of the peaches at on-the-tree prices was 95 cents per bushel. Therefore, the additional income per bushel was \$2.16 due to marketing at the roadside. The conclusion was, "If unpaid picking and selling labor had been used, as is the case of most owner-operated roadside markets, the increase would have been \$2.90 a bushel or \$4,226 during the 5-week period."

The South Carolina market was operated for another 5-week test period in 1957, and a total of 638.5 bushels of peaches were sold. The average selling price was \$5.10 per bushel equivalent. The marketing costs per bushel were: field labor 41.1 cents; market labor 66.6 cents; container costs 33.4 cents; depreciation, transportation, interest on investment, and advertising 9.9 cents. Total marketing costs amounted to \$1.51 per bushel. The adjusted net return (\$5.10 - \$1.51) was \$3.59

per bushel, or 70 cents out of each sales dollar for fruit. Estimated value of the peaches at on-the-tree prices was \$1.00 per bushel. Therefore, the additional income per bushel equivalent was \$2.59 (\$3.59 - \$1.00) or 259 percent more by selling at the roadside market. If unpaid family labor had been used to operate the market the net return above "on the tree" price would have been \$3.67 per bushel or 367 percent more than would have been realized by selling the fruit on the tree.

The authors also concluded that labor costs per dollar sales were probably more than they would have been at a commercial roadside market because of the experimental design used and the necessity of keeping sales data and other information.

In the New York study (5) the operating costs of 155 roadside markets varied from \$10 for one with no permanent equipment to \$4,780. The average cost of operation was \$578, or about 22 cents of each dollar of sales.

An earlier survey (1931 to 1933) of 311 roadside markets operating costs varied from \$30 to \$7,200 a stand and averaged \$651 (Table 31). The average was 24.3 cents of each dollar of sales. Here again, the largest single item of expense was labor, amounting to two-thirds of the total operating expenses.

In summarizing the operating expenses of the 311 stands the author points out, "The average cost of purchased produce was \$657. When this is added to the total operating expenses of \$651, and the sum (\$1,308) is subtracted from the total average sales of \$2,678, a return of \$1,370 is left for the farmer's produce. In addition, he or some member of his family earned \$355 for unpaid labor which was charged as an expense. This makes a total of \$1,725 to pay for family labor and for home-grown produce. The average operator and his family, therefore, received 64.4 percent of the total sales for his farm produce and time of the family used in operating the market. An operator should repeatedly ask himself this question: How much more or less would I have received for this produce sold in some other way, and how much more or less could have been obtained for the family labor at some other work?"

Table 31. Costs of Operating Roadside Stands, New York,
(311 stands, 1931 to 1933)

Costs and Returns	Amount		Percentage of		Percentage of
	Dollars	Dollars	Total Sales	Total Sales	
			(%)	(%)	
Average Total Sales		2,678	---	100.0	----
Cost of Produce Purchases for Resale		657	---	24.5	----
Sales from Home-Grown Produce		2,021		75.5	
Operating Expenses					
*Hired Labor	89	---	3.3		15.7
Unpaid Labor	355	---	13.2		54.5
Total Labor	444		16.5		68.2
*Container Costs	108		4.0		16.6
*Building and Equipment ¹	57		2.1		8.8
*Light and Power	12		0.4		1.8
*Advertising	10		0.4		1.5
*Telephone	3		0.1		0.5
*Miscellaneous	17		0.6		2.6
Total Operating Expenses	651	651	24.3	24.3	100.0
Gross Returns for Own Produce		1,370		51.2	
Value of Unpaid Labor		355		13.2	
Return for Own Produce and Family Labor		1,725		64.4	

* Indicates those items which involve a cash outlay.

¹Includes depreciation which is not a yearly expense.

Of the 153 New York markets studied in 1937 more than one-half had sales that averaged less than \$100 a week, with the average for this group being \$44 (Table 32). Total expenses for these markets amounted to 38 cents of each dollar of sales. Another group of nine markets had average weekly sales of more than \$395, the actual average of this group being \$479 per week. Expenses were less than 10 cents for each sales dollar.

The labor expenses for the group with the small weekly sales was about 29 cents and other expenses 9 cents of each dollar of sales. The group with the large weekly

Table 32. Relation of Weekly Sales to Total Operating Expenses of 153 Roadside Markets, New York, 1937

Weekly Sales Grouping (Dollars)	Stands (No.)	Average Total		Percent Total Expense is of Total Sales (%)	Average Weekly	
		Sales (\$)	Expenses (\$)		Sales (\$)	Expenses (\$)
0 - 94	88	823	315	38.3	44	17
95 - 194	38	2,834	779	27.5	136	37
195 - 394	18	8,273	1,303	15.8	290	46
395 or more	9	9,598	951	9.9	479	48
Total	153	2,715	584	21.5	121	37

sales had a labor expense of only 6.3 cents and other expense of 3.6 cents for each sales dollar. These figures indicate the importance of volume of business in reducing operating cost per unit of sales.

The Vermont study (23) showed labor costs amounting to almost one-third of the gross receipts. An average of 1,286 hours of labor valued at \$913 was utilized, (Table 33).

Table 33. Distribution of Labor Among Different Types of Personnel Used at 145 Roadside Markets, Vermont, 1949

Personnel	Number of Markets Employing	Hours Per Market	Value	
			Per Market	Per Hour
Men	89	349	\$289	\$0.82
Women	127	533	367	0.68
Children	46	222	131	0.59
Hired Help	21	182	126	0.69
Total	283	1,286	\$913	\$0.70

The operator and his family accounted for 86 percent of the total labor and women contributed 42 percent of the total. Operators of the Vermont markets valued their labor higher due to their interest in the business and their responsibility for running the market.

In a San Bernardino, California report (24) of a 4,700 bushel apple producer selling all but 470 bushels through a retail outlet, the entire marketing operation cost \$1.28 per bushel. This included the cost of packing, cider making, packages and materials, and storage as well as the selling cost (Table 34).

Table 34. Cost of Marketing Apples at Roadside in San Bernardino County, California

(4,700 - 45-lb. bushels - field boxes)	
Marketing Operations	Cents Per Bushel
<u>Cash Cost</u>	
1. Cider	37.3
2. Labor	32.1
3. Utilities	1.2
4. Cold Storage	7.7
5. Advertising	7.7
6. Materials	29.6
7. General Expense	3.9
Total Cash Costs	<u>119.5</u>
<u>Non-Cash Costs</u>	
8. Investment	
Depreciation	3.9
Interest	5.1
	<u>9.0</u>
TOTAL ALL COSTS	128.5

The labor, both family and hired (two-thirds was hired), was charged at \$1.50 per hour. Of the total labor cost of 32.1 cents per bushel, 20.5 cents was for packing and 11.6 cents was for sales. Four thousand bushels were sold fresh and 700 bushels were crushed for cider. The net cost to the grower for the production, packaging and delivery of cider was 37.3 cents per bushel picked or about \$1,750 for the entire 2,450 gallons produced. The other major cost was 29.6 cents per bushel for materials for packaging and sale of the fresh fruit. Apart from the heavy cider production and marketing cost, total packaging, the sales costs were 91.1 cents per bushel. This cost compares favorably with Ohio costs of 85.3 cents a bushel in 1956 for apples sold in a bushel container and 104.2 cents per bushel for apples sold

in consumer packages for the grading, packaging, selling and delivery of the fruit to the retail store (10).

Grading

One of the first considerations toward building a successful roadside business and gaining repeat customers is to offer an honest pack. Produce offered for sale at the roadside market should be carefully graded. It is often a good practice to offer two or more grades of the same product. Customers differ in their needs for both quantity and quality and in their ability to pay. Some want only top quality and are willing to pay, while others are looking for lower quality at bargain prices. The smart operator can often meet the needs of both.

When discussing quality Hauck (15) puts it this way, "If produce on top of the package is representative of the rest of the pack, customers will buy with confidence. Topping or heavy facing may fool a customer once but it will drive roadside business away. A name for reliability is the foundation for repeat business.

It often pays to grade. If two grades are available, the customers looking for top quality as well as the bargain hunter both may be satisfied. There is a place for 'day-old' produce if marked and sold as such."

Brown (7) found in making the South Carolina study that most operators did not sell graded products. Sixty-eight of the 78 operators reported that they did not grade any of the products sold. These operators said they sold only "good" or "the best" of their produce at the market. Ten reported selling some graded products, which consisted chiefly of eggs graded according to size.

The Delaware study (14) indicated that roadside market operators graded apples and peaches rather closely (Table 35). One operator graded apples into six grades, and five graded them in three grades. Nearly half of the stands graded apples into more than two grades.

Table 35. Number of Stands Selling Various Grades of Fruits, Delaware, 1936

Grade	Apples	Cantaloupes	Peaches	Tomatoes
1	4	3	3	7
2	7	6	8	2
3	5	3	1	1
4	1	0	1	0
5	0	0	0	0
6	1	0	0	0

A few stands graded cantaloupes into three grades each. Some operators reported selling 50 percent of their total produce as second grade. The other products graded rather extensively were potatoes, asparagus, and melons. Out of the 19 reporting, eight reported that they sold more second-grade than higher grade produce; ten, more first-grade produce than other grades; and only one mostly fancy products.

Kohls, et al (17) reported that most Indiana operators graded their produce, but uniformity of quality observed between markets varied greatly. Many of the market operators sold apples through regular market channels which required grading so they often sold them at roadside markets graded accordingly. A few of the markets offered only one grade of a given product, but most offered two or more grades. The "Fancy" grade sold for a premium over the going price. The second grade, referred to as "Standard," was good and useable but of somewhat lower quality. This grade usually sold at a price below city retail.

Some of the Indiana growers used their markets to dispose of low priced, inferior products that would not have been otherwise marketable. This practice was especially popular near centers of population where this produce was often used for canning. Many of the growers reported that this was one of the real advantages of roadside selling.

The author of the Vermont study (23) presented these suggestions regarding grading, "The operator of a roadside market has an opportunity to grade his produce

very carefully. If he will do so, purchasers will develop confidence in his market. This type of purchaser can bring him much repeat business, which this study shows is essential to successful roadside marketing. 'Facing the package' or putting the best produce on top, is a very bad practice. Operators might obtain more repeat customers by placing the best produce in the bottom of the package. Since products are sold directly to the consumer at roadside markets, the buyers know whom to blame if the produce is not up to par as indicated by the surface of the package.

Part of the produce should be offered in two or more grades. Some consumers wish to buy produce of high quality, and others wish to buy produce of lower quality at bargain prices. In order to meet these various demands, it is generally desirable to offer different grades of produce. Some products may move ungraded, but the products should be represented honestly at the top of the package. A keen operator will soon learn what his trade wants. A full-time attendant usually has time between sales to arrange the commodities as to quality, size, and type of containers, thereby making his produce more appealing to the customer."

Packaging

Research on packaging for roadside market selling indicates that it is a good practice to offer containers of several different sizes of the most popular produce items. Many families purchase in larger quantities at roadside markets than they would at retail stores, often for canning or freezing. Others prefer small amounts. This is particularly true of fruit purchases by tourists or transient trade. Bulk displays of some items may help to increase sales in some instances. Many market operators display in wooden baskets of various sizes. Because of the relatively high container cost, the purchases are usually transferred to paper bags and the basket retained for repacking.

Bull (8) makes the following observation about packaging, "There are many advantages to using inexpensive cardboard display containers that can be sold with the merchandise. In some cases these containers show off produce to a better

advantage; they save time by eliminating the need for transferring the contents to a bag; there is less physical damage to the product, while at the stand and while being transported in the customer's car. A few markets use plastic bags for apples and similar products. It is wise to check carefully on the costs and advantages of all types of containers before buying a supply."

In the Ohio study (21) Scott and Leed obtained information on the different types of containers in which fruit was displayed at permanent (Type 1) and table or rack (Type 3) roadside markets. They found that a larger proportion of Type 1 markets selling fruit used the bushel basket rather than other types of containers (Table 36). Second in importance, and not greatly different from the bushel basket, was the peck containers which were used by two-thirds of the markets compared with 69 percent using bushel containers. Ranked third in importance, in terms of number of markets using the container, was the one-half bushel basket.

Table 36. Proportion of Markets Selling Fruit in Different Types of Containers, Type 1 and 3 Markets, Ohio, 1950*

Types of Containers	Percent of Markets	
	Type 1	Type 3
Bushel	69.44	52.63
1/2 bushel	50.00	78.95
Peck	66.67	73.68
4 quarts	19.44	15.79
2 quarts	8.33	---
1 quart	27.78	21.05
Hamper	2.78	---
Cartons	8.33	---

*Included apples, peaches, peas and plums.

The type of container used by more Type 3 markets than any other container was the one-half bushel basket. It was used by nearly 80 percent of the markets and was followed by the peck basket used by approximately 75 percent of the markets. The bushel ranked third in importance.

Table 38. Number of Containers, Bushel Equivalents, Value by Size of Containers, and Value per Bushel Equivalent Sold at an Experimental Roadside Peach Market, 25 Weekdays, South Carolina, June 17-July 19, 1957

Size of Containers Sold	Containers Sold		Bushel equivalents		Value by Container size		Value per bushel equivalent
	(No.)	(%)	(No.)	(%)	(\$)	(%)	(\$)
2	772	33.4	48.3	10.1	409.58	16.8	8.48
4	666	28.8	83.3	17.5	546.45	22.5	6.56
8 (pk)	454	19.7	113.5	23.8	594.74	24.5	5.24
16 (1/2 bu)	376	16.3	189.4	309.8	740.55	30.4	3.91
32 (bu)	42	1.8	42.0	8.8	140.70	5.8	3.35
Total	2310	100.0	476.5	100.0	2432.02	100.0	----
Weighted Average							5.10

Purchases of peaches by out-of-state customers amounted to approximately one-fourth of the 2-quart and only about one-tenth of the one-half bushel baskets. The proportion of bushel containers of fruit sold to out-of-state customers was larger than the proportion of 8-quart and 16-quart containers. It was observed that many of these bushel containers were shipped as gift packs instead of being consumed by the motorists in out-of-state vehicles.

In a study of 1128 apple purchase preferences at Oak Glen in southern California 55 percent preferred to purchase in 10-20 pound units, 36 percent preferred 40 pounds or larger units and 9 percent preferred 3-5 pound units. The repeat customers (from previous years) were the more likely to purchase in the larger units. This suggests the desirability of some method of following up on customers who purchase in large quantities.

Donaldson and Johnstone (12) say, "A good packaging program often will sell more to each buyer. It will help to make your selling job easier because your weighing and selecting already has been done. A good package will help you build your own brand name and spark your advertising program. Roadside market men who do prepackaging find that they are able to make cleaner and neater displays.

But packaging is not as simple as pushing apples into a poke. It adds to costs. It takes study to decide which kind and size of container will fit your market and customers best. Prepackaging takes additional labor; prepackaging in some cases, especially for the small operator, does not necessarily require additional equipment."

Displaying

A good display can be a most effective salesman. It will cause customers to stop and stimulate them to buy. Supermarket chains have long since realized the importance of properly displaying produce. The roadside market operator can learn a lot by observing the supermarket display.

The display should be kept fresh, clean, neat, and well filled. As rapidly as purchases are made the produce should be replaced on the display to avoid a "picked over" appearance. Most studies indicate that large displays increase sales.

In Successful Roadside Selling, Bull (8) makes the following statements about displaying: "A well planned display has eye appeal. It looks fresh, clean, and neat. It has an interesting variety and makes the best use of color contrasts to get each item to stand out. Some of the best color contrasts are: red next to yellow or dark green; light green with yellow, purple or brown; dark green with red, orange, yellow or brown; yellow with red, green, brown or purple. White contrasts with all other colors. Avoid having any two items of the same color next to each other.

Table displays should be fairly even in height so that parts of the display do not look picked over. Ribbons of produce, each running from the front to the back of the table or rack, usually show things off to good advantage. Root and stalk vegetables should be placed horizontally in these ribbons.

Customers appreciate a display arrangement that makes shopping easy. All items should be easy to reach with prices plainly marked. 'Specials' should be highlighted by a distinctive price sign or a prominent position.

Maintenance work is required during the day if the display is to retain its full selling power. Containers for small and loose items are essential for efficient handling."

The authors of the Indiana roadside marketing study (17) found that displays of product were often poorly prepared and unattractive. Several markets had no visible display that could be seen by passing motorists. They found these markets to be at a distinct disadvantage in promoting sales. Displays that were properly arranged looked inviting to both the passing motorist and to the customer making a purchase.

Large displays of fruits or vegetables gave the impression of quantity as well as quality. The authors stated that customers preferred to choose one basket out of many rather than to choose from one or two baskets. "Mass effect" was attained either by a large volume of produce or by the proper arrangement of products. The "picked-over" appearance of some displays presented a very undesirable appearance.

Many studies suggested the following points about displaying:

1. The display should be attractive. It is your first impression on the customer--your "silent salesman."
2. Proper lights are essential--especially for night sales.
3. Produce should be easy to reach. Don't forget the short people.
4. Keep produce fresh looking. Freshness is your outstanding advantage over other sources of supply available to the customers.
5. Keep stands, tables and bins well painted, neat and clean. People like clean food.
6. Clean and trim produce thoroughly before placing on display.
7. Providing shade over the display helps produce to retain its "bloom" longer.
8. Allow appropriate space for each commodity. Intersperse fast moving items with "slow movers."
9. Have display uniform in height.

10. Good color contrast enhances eye-appeal and often results in "impulse sales."
11. Mass displays give the impression of both quantity and quality.
12. Replace sales from display, avoid that "picked-over" look.
13. Signs help to tell the story of a display. They should be clean, neat, and attractive.
14. Pests such as bees, flies, ants, etc., are not good salesmen. Provide control.
15. A variety of products will help to improve the beauty of a display and increase sales. Variety tends to satisfy more demands of a single customer.
16. Slow moving items may be placed in certain areas that have a greater selling power than others due to the pattern of stand traffic.

Pricing

Freshness and lower prices are two major reasons that people give for buying at roadside markets. Customers apparently feel that they are entitled to a somewhat lower price in return for assuming transportation costs and delivery services. The consumer realizes his profit in the form of freshly-harvested, top quality produce at prices below those in city retail stores. The grower-operator profits by receiving a price higher than if the produce were sold at wholesale farm prices.

The studies indicated that, generally, roadside market operators based their prices on the wholesale market price, the prevailing retail price or on a combination of both. In most cases prices were somewhat below those in nearby city retail stores unless the quality was exceptionally good and a price higher than city retail was justified.

Results of the Indiana study (17) showed prices varying widely at roadside markets. An example was cited where, within a distance of 5 miles along one highway, watermelons of the same size and variety were selling in four markets at prices ranging from 35 to 60 cents. The market operators were not in agreement on pricing policy. Out of the 85 markets included in the study 45 percent priced at retail

levels or above and 55 percent below city retail price (Table 39). Average annual sales for those markets pricing below city retail levels were above those pricing the same or above prevailing city retail prices.

Table 39. Pricing Policies and Annual Sales, 85
Indiana Roadside Markets, 1949

Pricing Policy	% of markets	% of annual sales	Average annual sales
Above City Retail Price	5	2	\$1,250
Same as City Retail Price	40	37	3,028
Below City Retail Price	55	61	3,665

The Indiana study also indicated that about 46 percent of the market operators received market reports from various sources, but only 22 percent used them as an aid for setting prices because most operators believed that these reports did not reflect local conditions. Over half of the market operators used local competition and nearby city retail store prices as guides to establishing prices.

The Vermont study (23) revealed that less than one-third of the market operators set their prices at less than city retail stores (Table 40). A little more than one-half set prices at retail store levels, and about 10 percent had prices higher than in city retail stores.

Table 40. Effect of Price-Fixing Method on Total Sales
in 145 Roadside Markets, Vermont, 1949

Basis for Pricing	No. of Markets	% of Markets	Total Sales	% of Business	Average Sales per Market
More than city retail price	13	9	\$ 31,177	8	\$2,398
Same as city retail price	85	59	100,172	24	1,178
Lower than city retail price	47	32	238,056	68	5,916

The above data show that the average sales of markets selling lower than city retail stores were \$5,916, compared to the average sales of \$2,398 for markets with

prices above those of city retail stores. The author reported that some markets selling above city retail store prices handled products of superior quality which may have justified the charging of higher prices.

In Ohio, Scott and Leed (21) asked roadside market operators how they determined selling prices at their markets. Forty-two percent of the Type 1 (permanent market) operators reported basing prices on the wholesale market price, 18 percent on the prevailing retail price, and 16 percent on a combination of wholesale and retail prices. Only about 5 percent of Type 1 operators indicated that they considered competition as the most important factor in determining selling prices.

Operators of other types of roadside markets in Ohio indicated that wholesale and retail prices were the most important among the considerations in selling price determination. Many, however, felt that retail price was by far the most important.

The New York study (5) revealed that the most popular method of establishing selling prices at roadside markets was to set them somewhere between the city wholesale and the city retail store price (Table 41). Only about 3 percent of the markets established their prices at above those in city retail stores.

Table 41. Effect of Price Fixing Method on Total Sales, New York, 1931, 1932, 1933, and 1937

Basis for Pricing	Stands (No.)	(%)	Total Value of stands (\$)	Weeks open (No.)	Average Total Sales (\$)	Average Weekly Sales (\$)
Above city retail price	13	3	444	28	3,541	126
City retail price	113	25	266	22	2,599	119
Between city wholesale and retail price	234	51	289	23	3,108	133
City wholesale or below	55	12	173	21	1,835	89
Other	39	9	274	19	1,778	93
Average all stands	454	100	272	22	2,725	122

At more than half the New York markets, prices were set between the wholesale and city retail prices. These 234 markets had the highest average weekly sales of

\$133. Twenty-five percent of the markets established their prices at about city retail, and some of the smaller markets (12 percent) maintained prices at about city wholesale levels.

In the Delaware (14) and South Carolina (7) studies the majority of the roadside market operators priced their products lower than the price of nearby retail stores. On the basis of the data available in the South Carolina study, it appeared that the dollar sales volume was larger at those markets where prices were no higher than in nearby retail stores.

The study of the East Cleveland, Ohio, Farmers' Market (22) indicated that growers based the price of their products on supply and demand, wholesale prices, quality of their produce, retail store prices, other stall prices, government bulletins, cost of production, past prices and weather conditions (Table 42). As a basis for determining price on each market day the growers listed supply and demand, or either supply or demand. Wholesale price was the next most common basis for determining the retail price, and quality of produce was the third as reported by the growers.

Table 42. Factors Influencing Price Determination by Growers*
Selling on the East Cleveland Farmers' Market, 1959

Factor	Factors Influencing	
	Usual Price Set (%)	During the Day Changes (%)
Supply and/or demand	40.1	65.6
Wholesale Prices	21.5	--
Quality of Produce	18.5	15.6
Retail Store Prices	7.7	--
Other Stall Prices	4.6	9.4
Government Bulletins	3.1	--
Cost of Production	1.5	--
Past Prices	1.5	--
Weather	1.5	3.1
Time of Day	--	6.3
Total	100.0	100.0

* Some growers gave more than one answer to the open end question, "How do you determine your price?"

In the study made in Ohio by Hauck and Hershler (16) 277 roadside market operators reported their methods of price setting. The findings revealed that 25 percent set prices at the retail level prevailing either in independent or in chain stores in nearby cities or towns (Table 43). Four percent charged higher-than-retail prices, and 48 percent charged prices lower than prevailing retail levels. The other 23 percent used various methods of pricing which did not permit their inclusion clearly in any one of the above three groups.

Table 43. Method of Price Setting at 277 Ohio Roadside Markets, 1932

Method	Type of Market				Total	
	1 (No.)	2 (No.)	3 (No.)	4 (No.)	(No.)	(%)
Between wholesale and retail Levels	20	31	35	26	112	40.4
At independent retail levels	10	13	15	21	59	21.3
To meet competition	1	12	10	7	30	10.8
At wholesale level	4	3	8	0	15	5.4
What traffic will bear	5	1	5	3	14	5.1
Above retail level	2	1	3	6	12	4.3
At Chain Store level	4	2	2	2	10	3.6
Cost plus mark-up	3	3	1	2	9	3.3
By Customer	0	1	2	3	6	2.2
Under wholesale level	0	0	2	3	5	1.8
At a level to sell all produced	1	2	0	0	3	1.1
Under Chain Store level	2	0	0	0	2	.7
Total	52	69	83	73	277	100.0

A comparison of prices charged at roadside markets in Ohio with nearby wholesale and retail price quotations was made. Four products commonly sold at roadside markets in several localities were checked over a period of 14 days. The wholesale and retail quotations were compared with the roadside markets, with comparisons being made only between prices as of the same date. One hundred and three roadside market prices of eggs were recorded, 65 of sweet corn, 65 of tomatoes, and 41 of potatoes (Table 44). The results showed that most of these prices fell between the wholesale and retail levels.

Table 44. Comparisons of Roadside Market Prices for Four Products with Nearby Wholesale and Retail Quotations, Ohio, 1932

Level of Roadside Market Prices	Number of Prices Recorded				Total	Percent
	Eggs	Sweet Corn	Tomatoes	Potatoes		
Above Retail Level	20	10	0	4	34	12.4
At Retail Level	9	16	9	10	44	16.1
Between Wholesale and Retail Level	70	27	26	19	142	51.8
At Wholesale Level	4	11	26	6	47	17.1
Below Wholesale Level	0	1	4	2	7	2.6
Total	103	65	65	41	274	100.0

In addition to the information regarding pricing policies already cited, the authors of the various studies offered the following observations and suggestions concerning pricing policy at roadside markets:

1. Most customers who buy at roadside markets expect some saving in price over city retail stores.
2. If prices are set too low, the margin will not be sufficient to cover operating costs.
3. If prices are set too high patronage is lost. Repeat business will decrease.
4. It is a good practice to offer two or more grades of a product at suitable price differentials.
5. A market selling in both wholesale and retail lots should have a reasonable price differential between the two levels.
6. People buying in larger quantities for canning or freezing expect, and should get, lower prices.
7. Multiple pricing, such as "2 for 25 cents" or "3 for 40 cents," is most effective and encourages larger sales.
8. Price tags on all items pay off. People are accustomed to seeing price tags in supermarkets. Often sales are lost because the customer hesitates to ask the price.
9. Market operators need to keep informed on wholesale prices. All efficient retailers do this and add 20 to 30 percent as a mark-up.

10. Watch the prevailing retail price of products sold at your market. Competition is always an important factor in price determination.
11. Changing prices at frequent intervals is not a good policy. For a customer to find that a neighbor bought the same item at a lower price is never a good recommendation.
12. "Sales" in terms of lower prices are not highly regarded by experienced roadside market operators.
13. Prices sometimes may need to be reduced to move large quantities and prevent spoilage.
14. Any item can be priced in or out of the market.
15. Including some information about the product, such as quality features or possible uses, is another effective sales building technique.

ADVERTISING AND PROMOTION

A popular slogan is "It pays to advertise." Glance at any newspaper or magazine, listen to any radio program, or watch television and it is clear that this slogan is believed. Millions of dollars are spent each year on various media of advertising. Apparently successful businessmen believe that advertising pays.

On the other hand, A California study (13) of 1,128 customers of roadside stands found that 64 percent claimed to have heard of the stand by word-of-mouth from friends, 27 percent from newspapers and 9 percent from the radio. In 1963 in a mailed interview received from 171 customers of a market near Columbus, Ohio only 1.4 percent reported that they learned of the market through advertising in newspaper and .6 percent by radio, although over \$1,500 was spent on these types of advertising during the year. The most frequent means by which they learned of the market was (74 percent) from signs and (24 percent) from friends and neighbors.

Any device used for calling favorable attention to a roadside market is considered good advertising. The kind and extent of advertising used depends on the type of market, characteristics of the customers, commodities handled, location of the market, and other factors. Most of the studies on roadside marketing emphasized the importance of effective advertising. The major media of advertising used by

roadside markets operators included signs, newspapers, radio, direct mail, and package labels.

According to Motts (19) data from a study made in Connecticut in 1952 showed the following information on expenditures for advertising at roadside markets (Table 45).

Table 45. Advertising Expenditures for 102 Roadside Stands, Connecticut, 1952

Amount Spent	Number of Stands
\$ 0 - \$ 250	86
\$251 - \$ 500	12
\$501 - \$1,000	2
Over \$1,000	2

Of the 102 stands in the Connecticut study, 41 made no expenditure for advertising. The stands that did advertise spent an average of \$280. The total spent by 61 stands was \$17,063, divided as follows: local newspapers, \$9,406; radio, \$1,985; and \$6,687 for other forms. The latter included postcards, pamphlets, billboard ads, etc.

Signs

The most common form of advertising used at roadside markets were forerunner signs along the highway and at the market. Studies show that many market operators were not making the most effective use of these. Many of the signs were too small, illegible, lacking in contrast, or were located along the highway in such a way as to be of little value.

The importance of having large letters on signs is indicated by the information prepared by Bond (5) and presented in Table 46.

Table 46. Visibility of Sign Letters on the Highway

Height of Letter (inches)	Maximum Distance Easily Visible (feet)	Approximate Time Visible At 35 Miles Per Hour (seconds)
1	25	1/2
2	50	1
3	80	1 1/2
4	100	2
5	140	2 3/4
6	170	3 1/3

Motts (18) gives the following figures on visibility of roadside signs at different speeds (Table 47).

Table 47. Distance for Reading Signs at Different Rates of Speed
If Your Sign is Visible for Three Full Seconds

Miles Per Hour	Feet Traveled Per Second	Visibility Distance if you Capture 3 Full Seconds of Readers Attention (feet)
20	30	90
30	44	132
40	60	180
50	75	225

In the Ohio study (21) Scott and Leed reported that, "Many of the operators of roadside markets indicated the products, or types of products, which they had for sale by placing signs along the highway, in front of the place of business, or near their place of business. Most of these signs were placed there in an effort to call to the attention of the prospective customer the products which were offered for sale. Few operators of roadside markets were attempting to use price as a basis for attracting the attention of the prospective customer. This is indicated by the fact that for the markets as a whole, only 12.6 percent of the operators indicated price on their signs along the road.

A small proportion of the operators attempted to attract customers' attention to their market by placing signs along the highway so that motorists would be warned of the market which they were approaching. Records were made of each market with signs 25 yards or more from the market. A summary of this information indicates that less than 30 percent of the Type 1 markets placed signs along the highway to inform prospective customers that they were approaching a roadside market. This compares with 32 percent of the Type 2 markets, about 11 percent of the Type 3 and 14 percent of the Type 4 markets."

The authors of the Ohio study stated that many roadside operators did not give sufficient attention to the make-up of signs advertising their market or their products. Letters on many of the signs were too small to be visible for a sufficient length of time to give the person riding in an automobile an opportunity to read them. Nearly half (about 46 percent) of all Type 1 markets with signs along the road used letters four inches in height or smaller. This compares with slightly more than 50 percent of the Type 2 markets having signs four inches in height or smaller, nearly 70 percent of the Type 3 markets and about 67 percent of the Type 4 markets. Such signs would be easily visible to a motorist traveling at 35 miles per hour for only two seconds or less.

The New Hampshire study (27) revealed that 78 percent of the markets had name signs. Approach signs were used by 48 percent of the markets. Readability was good at 84 percent of the stands having signs. All the commercial markets had signs, but farm markets were not as well identified.

The New Hampshire farm stands having name and approach signs had, on the average, higher gross incomes than the stands where signs were absent, (Table 48). These results support other studies on the importance of having one or more approach signs from both directions as well as signs at the market.

Table 48. Gross Income on New Hampshire Roadside Stands with Signs and Without Signs, 1957.

	Number of Stands	Average Gross Income Per Stand
With name signs	117	\$6,351
Without name signs	33	2,925
With approach signs	72	6,270
Without approach signs	78	4,990

Brown (7) in reporting on a South Carolina study said, "Apparently many South Carolina roadside market operators did not believe in advertising. Thirty-four of the 78 market operators did no advertising at all or had signs only at the market. Nineteen operators used signs at the market and on the highways. Seventeen used signs only along the highway. Only eight operators (10 percent) used radio, newspaper or other methods of advertising (Table 49). Because of the limited number of operators doing any advertising other than signs at the market or along the highway the effects of newspaper and radio advertisement upon sales could not be determined."

Table 49. Method of Advertising Used by 78 Roadside Market Operators, South Carolina, 1956

Method of Advertising	Number of Markets
No advertising whatever	12
Signs only at the market	22
Signs at the market and along highway	19
Highway signs only	17
Signs at the market, highway signs, radio	3
Market signs, highway signs, labels on containers	2
Market signs, highway signs, newspapers, radio	1
Highway signs, newspapers and radio	1
Market signs, telephone	1
Total	<u>78</u>

The relation between advertising and average weekly sales of the South Carolina markets is shown in Table 50. Average weekly sales was lowest for markets using no advertising methods and for those with signs displayed only at the market. The

greatest sales were found among the stands using newspaper, radio or labels along with signs at the market and approach signs.

Table 50. Classification of 43 Permanent Type Roadside Markets by Average Weekly Sales Volume and Method of Advertising, South Carolina, 1956

Methods of Advertising	Markets Reporting	Average Weekly Sales
None or signs at market only	12	\$ 73.14
Signs along highway	7	107.36
Signs at market and along highway	18	138.07
Signs at market, along highway and/or newspaper or radio, labels	6	728.33

Using the experimental roadside market setup to sell peaches in South Carolina, Brown and Chapman (6) tested the effects of sign use and placement on attracting customers with these results, "Data obtained indicated that the number of customers shopping at the roadside market was significantly affected by highway sign placement. When no signs were used except at the market itself only 2.7 percent of the total highway traffic stopped and shopped at the market (Table 51). When highway signs were located 300 feet from the market the proportion of traffic stopping was 3.4 percent or an increase of 25.9 percent in the proportion of traffic stopping. This increase evidently came from relatively slow moving traffic as well as from high speed traffic which passed the market, turned around and came back. The proportion of traffic stopping increased still further when signs were placed 600 and 900 feet from the market. The largest percentage of traffic stopped at the market when signs were placed 1200 feet from the site. With signs at this distance 4.1 percent of the traffic stopped as compared to 2.7 percent when no highway signs were used.

Table 51. Proportion of Highway Vehicles Stopping at an Experimental Roadside Peach Market When No Highway Advertising was Used, And When Highway Signs Were at Various Distances from the Market, 25 Weekdays, South Carolina, June 18-July 20, 1956

Sign Location	Total Vehicles Daily Traffic (No.)	Traffic Stopping at the Market (%)	Increase in Proportion of Customers (%)
Market only	11,962	2.7	---
Market and 300 feet	13,519	3.4	25.9
Market and 600 feet	12,055	3.7	37.0
Market and 900 feet	13,170	3.6	33.3
Market and 1,200 feet	12,001	4.1	51.9

The number of individual sales was also significantly greater when highway signs were used. Sales were significantly higher when signs were 600, and 900 feet from the market than when they were not used or were at 300 feet. Sales were significantly greater at 1,200 feet than at any of the other distances.

During the 25-day test period, 62,707 vehicles used the highway while the market was open for business. Of these, 2,188 vehicles, or about 3.5 percent, stopped and the occupants purchased one or more containers. Customers traveling in out-of-state vehicles that stopped at the market increased from 8.8 percent when no highway signs were used to 16.3 percent when signs were at 900 feet, and to 16.1 percent when signs were at 1,200 feet. This increase in the proportion of out-of-state customers is highly significant because these customers lacked prior knowledge of the market's location and changes in sales to these customers could only have been due to highway sign placement."

After the initial test period was concluded in 1956, and again in 1957, the experimental roadside peach market was kept open for an additional six days each season (12 days total for the two seasons) to test the effects on sales of advertising one product as compared to advertising a variety of products (variety signs). During this test period (both seasons) only peaches were advertised for one-half of each day on the highway signs. During the other half of each sales day the

signs advertised peaches, watermelons, grapes, cantaloupes, and honey. All of the products were sold during the 12 days regardless of the kind of advertising used.

The results of these tests revealed that a significantly higher proportion of customers stopped at the market when variety signs were used as compared to signs advertising only peaches. For the 12 half days when only peaches were advertised on the signs about 3 percent of the total traffic stopped at the market. When variety signs were used the proportion of traffic stopping at the market increased to nearly 4 percent. The proportion of total traffic stopping increased approximately 20 percent, and total dollar sales increased nearly 9 percent (Table 52).

The authors reported that the effect of variety signs, used in the test, was to decrease the proportion of customers buying peaches only and increase the proportion buying other products and the proportion buying other products plus peaches. There was no change in the average sales per customer. When only peaches were advertised 84.2 percent of the total dollar sales was from peaches. When variety signs were used, only 75.9 percent of the total dollar sales was from peaches.

Table 52. Percentage of Traffic Stopping, Proportion of Customers Purchasing Average Sale Per Customer, and Differences in Purchase by Type of Advertising,* Experimental Roadside Peach Market, South Carolina, 1956, 1957

Item	Type of Advertising		
	Peaches Only	Variety of Products	Difference
Percentage of vehicles stopping	\$ 3.19	\$ 3.93	.74
Proportion of customers buying (peaches only)	68.21	58.77	-9.44
Other products	13.48	18.63	5.15
Other products plus peaches	18.31	22.60	4.29
Average sale per customer	1.54	1.53	-.01
Proportion of sales			
Peaches	84.20	75.90	-8.30
Other products	15.80	24.10	8.30
Total Sales	\$757.30	\$834.61	8.77

*Highway signs advertising only peaches, and highway signs advertising a variety of products.

Results of the Delaware (14) and Indiana (17) studies showed that the use of signs at the market and along the highway were the most common medium of advertising utilized.

Bond (5) in discussing the use of signs made these comments and suggestions, "Many persons object to signs along the highway. Too many signs give the motorists the impression that the stand is over-commercialized. One or two signs placed beside the highway so that motorists approaching from either direction will be aware of the market before reaching it are enough. These should be far enough from the stand to permit the motorist to slow down by the time he reaches the stand. Many customers are lost because the signs are not well planned."

The authors' suggestions are:

1. Do not use too many signs.
2. Place signs at the proper distance from the market.
3. Use contrasting colors. Letters should be of a color that is a sharp contrast to the background of the sign. This makes them easily read.
4. Make the letters large enough to be easily read at some distance.
5. Make the sign brief, but informative.

Newspaper, Radio, and Television Advertising

Other effective methods of building sales are the use of newspaper, radio and television advertising. Spot announcements are often quite effective in enticing customers to visit the market. These are particularly good to announce the opening of the season for popular homegrown products such as peaches, strawberries, tomatoes, sweet corn, melons, etc. Most studies indicated that roadside markets operators used this type of advertising rather sparingly.

In discussing newspaper advertising Donaldson and Johnstone (12) say, "Spot ads are important, particularly if you intend to run an ad regularly over a given period of time. This type of ad has the advantage of originality in design and continuity. The name of the market can be publicized in bold type day after day.

It is advisable to have the ad appear on the same page each time, in order that the people will become accustomed to seeing it. Regular insertion is recommended."

The 1950 study in Ohio (21) showed that few operators of roadside markets used newspapers or radio to advertise their products or markets (Table 56). About three fourths of the Type 1 markets and more than 90 percent of the other types did no newspaper or radio advertising. Radio as an advertising medium was used by only one market. (Table 53).

Table 53. Roadside Markets Advertising Through Newspapers and Radio by Type of Market, Ohio, 1950

Advertising Media	Type of Market							
	Type 1*		Type 2*		Type 3*		Type 4*	
	(No.)	(%)	(No.)	(%)	(No.)	(%)	(No.)	(%)
Newspaper	9	23.7	1	9.1	2	4.8	1	2.9
Radio	1	2.6	0	0.0	0	0.0	0	0.0
None	28	73.7	10	90.9	40	95.2	34	97.1
Total	38	100.0	11	100.0	42	100.0	35	100.0

* Definition: See page 13.

In Indiana (17) newspaper advertising was reported to be quite popular with the markets patronized largely by customers from nearby urban areas. Operators felt that newspaper advertising was particularly helpful in moving surpluses at peak seasons. About two-thirds of the Indiana market operators advertised in newspapers either regularly or occasionally. Those advertising regularly usually featured two or three main products then available. Many operators used the newspaper to announce opening and closing dates, first-of-season produce, and products in heavy demand or supply. The "classified ad" section was used for most of this advertising.

Smith and Cravens (22) questioned consumers in the area normally served by the East Cleveland Farmers' Market regarding weekly advertisements of the market

appearing in the local neighborhood paper. The results showed that only 24.2 percent of the respondents had seen any of the ads in the newspaper.

Another form of advertising for the East Cleveland Market was the recommendations by customers to friends and relatives. Eighty-five percent of the customers reported that they had recommended the market to someone.

Out of 165 roadside markets included in the New Hampshire study (27) only 59 used newspaper ads, 13 used radio, and 19 used other advertising media such as name on the container, postcards, and calendars.

Other Advertising Methods

Indiana roadside market operators (17) emphasized that effective advertising had to be coupled with such factors as quality, honesty, dependability, reasonable prices and courteous service. These operators reported that satisfied customers were the best and least expensive advertising. "The satisfied customer returned for more products and aided in disseminating helpful information to other potential customers." The value of repeat customers is illustrated by the experience of Indiana operators as shown by Table 54.

Table 54. Relation of Repeat Business to Annual Sales,
85 Indiana Roadside Markets, 1949

Percent of repeat Business	Percent of Markets	Average Annual Sales	Average Percentage repeat business
C - 25	12	\$ 700	11
26 - 50	33	2,031	38
51 - 75	22	4,350	73
75 -100	33	4,638	92

Further evidence of the value of repeat business is revealed by the Vermont study (23). Nearly two out of every three dollars received by Vermont operators came from repeat customers (Table 17).

Wallace (25) makes this statement, "Repeat customers are your largest source of income and one of the best and least expensive methods of advertising. Repeat customers are also a good check on how well your stand appeals to people, since only the satisfied customer will return.

In order to develop repeat trade, your produce should be of high uniform quality, tempting, and be sold at a fair price. Your returns are higher when selling direct to the consumer than to the wholesaler, so that only well-graded produce should go on the stand. Good, fast, and courteous service along with pleasant surroundings, will make the customer want to return."

Although an attractive display, signs, and satisfied customers are about as far as most operators go with their advertising program, some have found other media, at times, proved effective. The most common of these are: name of market on container, sending post cards to customers, labels, lighted signs at market for night selling, use of premiums, passing out samples of produce, package inserts (how to care for, uses, recipes, etc.), direction cards, exhibits at fairs, and use of the telephone.

Product Sold

Variety of Products

A wide variety of products is sold at most roadside markets. Fresh fruits and vegetables make up the bulk of sales. Studies show, however, that a variety of products increases sales (Table 52). A variety of produce has been found to be desirable but not always necessary for successful operation. Many markets are successful where only one or two items are sold. Some specialize in fruits, others in vegetables. When possible, the variety should be large enough to fill the customer's requirements for fresh produce with one stop at a market. If this is not possible, the market operator might try to meet the consumer's needs for at least one line of fresh produce, such as fruits or vegetables.

In Ohio, Hauck and Herschler (16) observed nearly 30 kinds of fresh vegetables and 20 kinds of fresh fruit at the 292 markets visited. Many other miscellaneous items were offered for sale including dairy products, fresh and smoked meats, honey and beeswax, maple products, cider, vinegar, fruit butters, flowers and nursery stock, home canned and baked goods, ice cream, and candies (Table 55).

The survey revealed that 16 percent of markets handled vegetables only, 4 percent fruit only, and 22 percent fruit and vegetables only. Nearly 80 percent of the markets sold vegetables and nearly 60 percent sold fruit. Poultry and eggs were sold by slightly less than one-half of the markets surveyed.

Table 55. Products Handled by 292 Roadside Markets in Ohio, 1932

Class of Products Sold	Type of Market									
	1		2		3		4		Total	
	67 Markets		69 Markets		83 Markets		73 Markets		292 Markets	
	No.	%	No.	%	No.	%	No.	%	No.	%
Vegetables	59	88.0	67	97.1	72	86.7	35	47.9	233	79.8
Fruit	59	88.0	45	65.2	52	62.6	16	22.0	172	58.9
Poultry and eggs	33	49.3	21	31.9	27	32.5	58	79.4	139	47.6
Miscellaneous	29	43.3	5	7.2	17	20.5	18	24.7	69	23.6

A later Ohio study made by Scott and Leed (21) showed that very few roadside markets tended to specialize in either fruit or vegetables or any single commodity (Table 56). All of the Type 1 and 3 markets handled fruit and vegetables, and nearly 40 percent of the Type 4 markets sold fruit and/or vegetables. Poultry and eggs were the second most important group of products sold, in terms of markets handling them, by Type 1 and 2 markets.

The Type 1 (permanent) markets generally handled a greater variety of products than any of the other types of markets. Such items as soft drinks, novelties and miscellaneous commodities were quite commonly sold at Type 1 markets, and very rarely found in other markets. Generally, Type 4 markets handled the fewest commodities, two to four items being the most common number handled by these markets.

Table 56. Commodities Sold During the Year at Types 1, 3, and 4 Markets Where Detailed Records were Taken, Ohio, 1950

Commodities Sold	Percent of Markets		
	Type 1	Type 3	Type 4
Fruit only	7.89	7.14	17.14
Vegetables only	5.26	35.71	17.14
Fruits and Vegetables	86.84	57.14	22.86
Fruits and/or Vegetables	100.00	100.00	57.14
Eggs only	31.58	9.52	14.29
Poultry only	5.26	4.76	8.57
Poultry and eggs	10.53	7.14	45.71
Poultry and/or eggs	47.57	21.43	68.57
Honey	42.11	2.38	14.29
Maple syrup	5.26	2.38	2.86
Soft drinks	26.32	----	----
Groceries	13.16	----	----
Novelties	13.16	----	----
Miscellaneous	26.32	2.38	----
Dairy products	-----	----	2.86

Information was obtained by Scott and Leed on the various products being advertised on signs along the highway or in front of the markets to determine the extent to which emphasis was being put on various products by roadside market operators (Table 57). More than 94 percent of Types 1, 2 and 3 markets advertised fruits and vegetables. About 50 percent of the Type 2 and 3 markets advertised vegetables only, while 44 percent of the Type 1 markets advertised fruits and vegetables. Eggs were among the more important products advertised.

Delaware (14) roadside markets sold a variety of miscellaneous items in addition to agricultural products (Table 58). The miscellaneous items sold included gas line, oil, soft drinks, pastries and candy. The most popular agricultural products were apples, potatoes, eggs, asparagus, strawberries, cantaloupes, peaches, watermelons, and grapes.

Table 57. Products Advertised by Operators of Different Types of Roadside Markets, Ohio, 1950

Commodities	Percent of Markets			
	Type 1	Type 2	Type 3	Type 4
Fruits only	21.88	21.74	29.29	18.78
Vegetables only	28.13	52.17	55.56	18.25
Fruits and Vegetables	44.38	21.74	10.10	2.12
Fruits and/or Vegetables	94.38	95.65	94.95	39.15
Eggs	20.63	17.39	9.09	49.74
Poultry	6.25	13.04	2.02	22.49
Dairy products	3.75	8.70	1.01	4.23
Honey	11.25	8.70	6.06	5.29
Groceries	2.50	----	----	----
Soft drinks	5.00	----	----	----
Rabbits	----	----	----	0.53
Maple Syrup	0.63	----	----	0.53
Miscellaneous	8.75	4.35	----	0.79

Table 58. Non-Agricultural Products Sold by Roadside Markets, and Number of Markets Selling, Delaware

Products Sold	Number of Markets Selling
Gasoline	10
Candy	12
Sandwiches	3
Soft drinks	12
Tobacco	11

The 145 roadside markets included in the Vermont study (23) varied greatly as to the products sold. Some markets specialized in only one product, while others offered quite a variety (Table 59). Ninety-seven of the 145 markets sold fruit, and fruit sales amounted to 43 percent of the total business. Apples accounted for the largest amount of total dollar sales followed in order by tomatoes, strawberries, citrus fruits, melons, raspberries, pears and plums, grapes, and all other fruits. Included in the manufactured products sold were gas, oil, soft drinks, etc.

Table 59. Relative Importance of Various Groups of Commodities Sold by 145 Vermont Roadside Markets, 1949

Groups of Commodities	Markets		Annual Sales		Average Sales Per Market
	Number	Percent	Total	Percent	
Fruits	97	67	\$174,706	43	\$1,801
Vegetables	93	64	107,019	26	1,151
Eggs	31	21	18,820	4	607
Maple products and honey	75	52	64,125	16	855
Manufactured products	24	17	44,735	11	1,864

The New Hampshire study (27) showed that vegetables accounted for the greater percentage of sales at farm stands, while fruits led at farm salesrooms (Table 60). At commercial stands the largest proportion of sales were vegetables which accounted for about one-third of the total sales volume.

Table 60. Percent of Sales of Various Products for All Stands in Different Types of Operations, New Hampshire, 1957

Type	Number	Vegetables (%)	Fruits (%)	Flowers (%)	Poultry (%)	Others (%)
Farm stands	102	41.7	25.5	6.4	6.1	20.3
Farm salesrooms	48	10.2	57.8	8.8	13.2	10.0
Commercial stands	15	30.3	19.4	2.6	5.8	41.9
All stands	165	31.2	29.9	5.6	7.5	25.8

A large variety of fruits and vegetables was sold on the East Cleveland Farmers' Market (22) by growers operating stalls (Table 61). Apples, peaches, strawberries, pears, grapes, cherries, raspberries, and plums were the principal fruits sold. Sweet corn, tomatoes, and green beans were the three top vegetables. About 25 other vegetables were sold at the market by growers.

Eggs and poultry were two other important products sold. Producers reported sales of more than 188,000 dozen eggs and 24,000 pounds of poultry during 1959. About 100 dressed rabbits were sold at the market. Other products sold included popcorn, honey, cider, and maple syrup.

Four stalls on the market were operated by non-growers. One of these sold cheese, another sold bakery goods, and the third sold cured meats. No fresh meats were sold. The fourth stall operator carried a complete line of out-of-season produce.

Table 61. Amounts of Each Commodity Sold and Number of Growers Reporting their Sale, East Cleveland Farmers' Market, 1959

Commodity	Amount Sold	No. of Sellers	Commodity	Amount Sold	No. of Sellers
Fruits					
Apples	23,700 bu.	14	Okra	100 lbs.	2
Cherries	4,525 pks.	5	Onions	1,040 bu.	6
Grapes	26,670 pks.	12	Parsnips	150 pks.	1
Peaches	23,485 bu.	22	Peas	1,514 pks.	5
Pears	6,875 bu.	7	Peppers	2,430 bu.	16
Plums/prunes	2,097 bu.	9	Potatoes	10,050 bu.	15
Raspberries	22,976 qts.	7	Radishes	500 doz.	1
Strawberries	73,100 qts.	16	Rhubarb	1,500 bun.	2
Vegetables					
Asparagus	6,000 bun.	5	Spinach	900 bu.	2
Beans	7,740 bu.	20	Squash	4,450 bu.	11
Beets	2,710 doz.	6	Tomatoes	17,100 qt.	16
Broccoli	3,500 bun.	3	Turnips	325 bu.	2
Cabbage	3,750 bu.	14	Other		
Cauliflower	13,000 bu.	8	Cider	2,500 gal.	2
Carrots	1,800 doz.	3	Corn (pop)	80 bu.	1
Celery	3,000 bun.	1	Eggs	188,570 doz.	11
Corn (sweet)	52,500 doz.	22	Flowers	20,400 doz.	5
Cucumbers	2,195 bu.	16	Honey	250 lbs.	1
Egg plant	50 bu.	1	Maple Syrup	900 gal.	3
Kohlrabi	1,400 doz.	2	Poultry (dressed)	23,914 lbs.	4
Lettuce	1,400 bu.	3	Poultry (live)	200 lbs.	1
Lima beans	845 bu.	7	Rabbits	100 lbs.	1
Melons	3,175 bu.	10	Shrubbery	1,560 bun.	4

The results of the South Carolina study (7) showed that slightly over one-fourth of all markets sold only one product (Table 62). Just a few markets sold more than 10 products. The permanent markets generally handled a greater variety of products than the other type markets.

Among fruits, peaches followed by apples, were the best sellers at South Carolina markets. For vegetables, tomatoes ranked first followed by watermelons, cantaloupes, sweet corn, peas, beans, okra, and various other vegetables.

Table 62. Number of Products Sold by Type of Market, 78 Roadside Markets, South Carolina, 1956

Number of Products	Markets Reporting by Type			
	Permanent	Temporary	House	All Types
1	9	4	8	21
2 - 5	18	3	6	27
6 - 9	12	3	-	15
10 - 13	3	1	-	4
14 or more	8	2	1	11
Total	50	13	15	78

At the 175 Indiana roadside markets studied (17), fresh fruits accounted for 68 percent of annual sales, apples and peaches being the most common fruits handled. Vegetables made up 19 percent of total sales (Table 63). The most important vegetables were sweet corn, melons and tomatoes. The miscellaneous agricultural commodities handled included such items as dairy and poultry products, meats, honey, flowers, and cider.

Table 63. Relative Importance of Various Groups of Commodities Sold by 175 Indiana Roadside Markets, 1949

Groups of Commodities	Percent of Markets	Total Annual Sales	Percent of Total Sales	Average Annual Sales per Market*
Fruits	93	\$429,522	68	\$2,651
Vegetables	63	120,209	19	1,093
Eggs and Poultry products	31	16,491	3	300
Honey	12	3,391	--**	162
Flowers	11	16,959	3	893
Manufactured product***	13	36,534	7	2,023

*Per market handling the product

**Less than 0.5 percent

***Includes such products as bread, soft drinks, candy and groceries.

Source of Supply

A steady supply of products is important for successful roadside marketing. Studies show that many roadside market operators sell only products grown on their

farm, while others supplement by purchasing supplies. There are other operators who buy all they sell. There are many cases of successful markets using each of the three methods. The important thing is to maintain a steady supply throughout the selling season.

According to the findings of Scott and Leed (21) roadside markets in Ohio provided a very important outlet for the produce grown by many operators (Table 64). More than half of the operators sold at roadside all produce grown.

Table 64. Proportion of Operators' Produce Sold at Roadside, By Type Market, Ohio, 1950

Proportion sold at Roadside	Type of Market			
	1 (%)	2 (%)	3 (%)	4 (%)
1 - 25%	9.09	---	7.69	9.09
26 - 50%	9.09	11.11	5.13	3.03
51 - 75%	9.09	11.11	7.69	3.03
76 - 99%	21.21	0.00	7.69	9.09
100%	51.52	77.78	71.80	75.76
Total	100.00	100.00	100.00	100.00

Most of the produce sold by Types 2, 3, and 4 markets was grown by the operator. Many of the Type 1 markets bought a considerable proportion of their produce either directly from other growers or through a marketing agency (Table 65). About 25 percent of the Type 1 operators bought more than 3/4 of the produce sold from other growers. Only one out of five, or 21 percent, did not purchase any produce from other sources.

Table 65. Proportion of Produce Purchased from Other Growers or Other Sources, Type 1 Markets, Ohio, 1950

Proportion Purchased	Markets	
	Number	Percent
None	8	21.05
1 - 25%	9	23.68
26 - 50%	4	10.53
51 - 75%	7	18.42
76 - 100%	10	26.32
Total	38	100.00

In an earlier study of Ohio roadside markets Hauck and Herschler (16) found most market operators producing all or nearly all of the products they sold. Of the operators interviewed, 215, or 73.6 percent, sold only products they grew. Thirty-six operators, 12.3 percent, bought some products but none bought more than one-fourth of their offerings. There were eight, or 2.8 percent, who produced none of the products they sold. Although 19 operators were reported as non-farmers, 11 of these sold some home-made products at their markets. Ten of the market operators sold products for others on a commission basis, with the proportions of their total volume ranging from 5 to 100 percent.

Roadside market operators included in the New Hampshire study (27) produced more than half of the fruits and vegetables they sold. Farm salesrooms handled almost entirely produce grown on the operator's farm (Table 66). Commercial stands purchased most produce sold, yet a few produced a small proportion. Some of the fruits and vegetables purchased by roadside markets came from local growers, but a large portion was secured through regular wholesale channels. Farmer operated markets and salesrooms accounted for 65 percent of the total sales volume of all stands, and commercial markets accounted for the other 35 percent.

Furthermore, in New Hampshire, the roadside market was a major outlet of the production from the operator's farm as indicated in Table 67.

Table 66. Percent of Total Dollar Sales Resulting from Home-Grown Products, New Hampshire, 1957

Type of Market	No.	Vegetable (%)*	Fruits (%)*	Flowers (%)*	Poultry (%)*	Other (%)*
Farm Stands	102	57.3	53.6	10.5	7.3	3.3
Farm Salesrooms	48	97.2	83.3	57.3	90.7	3.2
Commercial Stands	15	.9	6.2	0.0	.8	0.0
All Stands	165	51.4	61.5	64.0	57.3	5.5

*Figures are percentages which home-grown products make up of total dollar sales of the item.

Table 67. Stands Classified by Counties and Percent and Percent of their Farm Production Sold over the Stands, New Hampshire, 1957

County	100% sold over stand	50-99% sold over stand	Under 50% sold over stand	No Production
	(Number of stands)			
Belknap	6	4	7	1
Carroll	3	1	2	1
Cheshire	2	3	1	0
Grafton	3	4	0	0
Merrimack	8	6	1	3
Hillsboro	16	7	9	1
Rockingham	21	10	15	0
Stafford	3	6	3	3
Sullivan	8	1	6	0
Total	70	42	44	9

Brown (7) observed that the average South Carolina roadside market operator produced approximately 75 percent of all the products sold. The remainder was fairly evenly divided between purchases from other local growers, or truckers. Most of the operators selling just a few products handled only produce grown by the operator (Table 68). The large markets generally sold a wider variety of products and purchased more of these. Truckers were the chief source of most of these purchases, which were largely citrus fruits and bananas. Gross sales of these products were not large, however, since many of them were handled only occasionally or infrequently.

Table 68. Value of Home-Grown Products as a Percentage of Total Gross Sales, 78 Roadside Markets, South Carolina, 1956

Value of home-grown products as a percentage of total gross sales	Markets Number	Reporting Percentage
Less than 50	7	9
50 - 59	6	8
60 - 69	1	1
70 - 79	5	6
80 - 89	3	4
90 - 99	12	15
100	44	57
Total	78	100

Except for the four non-growers stall selling bakery products, cheese, cured meats, out-of-season fruits and vegetables, the 49 grower-operated stalls on the East Cleveland Farmers' Market (22) sold only produce grown on the farms of the operators (Table 61).

The authors of the Indiana study (16) reported, "For the most part, products handled at the 175 Indiana roadside markets came either from the farm of the operator or from nearby farms. Nearly 90 percent of the markets were located on the operators farm. Of the 175 markets operators contacted, 59 percent sold nothing but goods they produced themselves. An additional 22 percent bought less than one fourth of the goods that they sold.

Only 8 percent purchased three fourths or more of the products that they sold. Most markets which bought additional products for sale were the larger markets.

For many growers, the roadside market was the principal sales outlet for their produce. About two-thirds of all the products grown for sale by 85 surveyed operators were sold through their own market."

In Delaware (14) a large percentage of the stands were commercial operations that purchased all of the products sold. Most of the products, however, came from the southern part of the State, thereby providing retail outlets for locally grown produce. Four of the markets included in the study bought all their produce from truckers and seven others purchased a portion of the produce sold from truckers (Table 72). Ten of the market operators grew all the produce they sold.

Table 69. Percentage of Products Raised by Various Roadside Stand Operators, Delaware, 1935

Percent raised	Number of Stands
0	4
1 - 25	4
26 - 50	1
51 - 75	2
76 - 100	10
Total	21

Home Processed Foods

Studies indicate that many markets increase their total gross sales and do a very lucrative business by selling home-processed foods. Canned, preserved, and frozen fruits and vegetables, baked products, and cured meats are among the most popular items. Many markets along the eastern seaboard in the Middle Atlantic States make a specialty of "country hams."

Donaldson and Johnstone (12) present the following list of home processed products that have been successfully marketed at roadsides:

Apple Butter	Dried Apples
Buttermilk	Dried Prunes and Apricots
Candy	Ice Cream
Canned Meats	Jellies, Jams, Preserves
Cherries	Molasses
Cider	Peaches
Cookies, Cakes, Pastries	Pickles and Relishes
Cottage Cheese	Sauerkraut

The authors also cited the example of an apple grower in the eastern United States who has been successful freezing and selling sweet cider. This grower makes the cider in the fall, freezes it while fresh in five gallon cans and stores it. During the winter and spring months the operator thaws the cider as needed and sells it in the original state of freshness.

Specialty Items

Often roadside market operators attract customers to their market and build a reputation by the use of specialty items. Usually such items are closely associated with the area or region in which they are produced. Specialty items, common to a region or area, especially appeal to tourists. However, there are some products, such as Christmas trees, that can be merchandised quite effectively to local customers.

Donaldson and Johnstone (12) made the following statement regarding Christmas trees, "For years many folks have bought Christmas trees from roadside markets. There is a feeling upon the part of buyers that the trees are better and last longer if freshly cut. Because of this a very satisfactory business has developed."

Some specialty items which have proven successful include:

Maple syrup and products
Christmas Trees
Holly wreaths
Handicraft
Flowers
Pecans

Hams and Smoked Meats
Dates and Figs
Fancy or Select Fruits
Walnuts
Milk Products and Cheese
Baked Goods

MAINTAINING PRODUCT QUALITY

Besides the operator, quality and freshness of the produce are the next important items in successful roadside marketing. The customers expect, especially at the grower-operated market, to find top quality fresh produce at the roadside market. If the produce is not top quality then only the market operator is to blame. Freshness and quality are closely associated in the minds of the consumers. Freshness and quality are the most important advantages roadside markets have over other retail competition. Maintaining freshness and quality is of prime importance.

The author of the Vermont study (23) emphasizes this, "From the consumer's viewpoint, freshness is the element of quality which is most important. Consumers tend to associate freshness with buying at roadside markets. Market operators should capitalize on this fact, not only because consumers look for freshness, but because it is easier for them to obtain fresh produce than it is for other merchants. Roadside markets are nearer their source of supply. Thus operators can pick their supply in the early morning, when it is of highest quality, and have it in their markets ready for sale the same day. Effort should be made to keep produce fresh after it has been picked by keeping it shaded and moistened at intervals if necessary. Any produce that is carried over from one day to the next should be kept separate and not 'mixed in' with the new day's supply. Any carry-over should be so marked and priced accordingly."

Bull (8) adds further emphasis regarding maintaining quality of produce with the following statement and suggestions:

"One of the most valuable things farm markets have to sell is freshness. It is essential that produce be kept fresh if the market is to be successful.

Fresh fruits and vegetables are alive and breathing. Sunlight and high temperatures speed up the breathing process after harvest and will shorten the sales life. Keep produce cool and shaded at all times. Plan to harvest the right quantities to keep things moving rapidly through the market.

Careful preparation gives produce much of its eye appeal. It is a well known fact that most fruits and vegetables are sold on the basis of how they look. Often these sales based on eye appeal are termed 'impulse' sales, and the object of produce trimming, washing, and sorting is to get the most 'impulse' sales possible.

Trim vegetables to remove all discolored, damaged, over-matured and decayed parts. Wash off dirt and dust to give produce a sparkle and make it appealing. Produce items contain as much as 95 percent water, so extra moisture must be provided for leafy vegetables that tend to wilt and lose their eye appeal.

Make it a policy to stick to standards of proper maturity, optimum size and freshness in grading produce for sale. It pays in terms of repeat sales and word-of-mouth advertising to have consistently high quality. Your customers will never consider poor quality a bargain at any price."

To get an indication of the consumer's opinion regarding quality of produce sold at roadside markets the author of the Delaware study (14) canvassed groups of roadside market customers in Delaware. The two groups making the largest purchases appeared to be influenced more by freshness of product and lower prices more than by other factors (Table 70).

Table 70. Number and Percentage of Consumers Who are Influenced by Various Factors in Making Purchases at Roadside Markets, Delaware, 1935

Amount Bought in Year	Better Quality (%)	Fresher (%)	Cheaper (%)	Convenient (%)
\$ 0	3.3	2.3	2.3	0
\$ 1 - 10	78.8	46.6	34.7	27.1
\$11 - 20	65.0	67.5	52.5	12.5
\$21 - 30	50.0	81.3	75.0	31.2
Above \$30	55.5	83.3	77.8	22.2
Average	49.8	40.1	32.2	16.5

The best quality produce can be ruined by improper handling. Proper handling begins at harvest or even before. Like eggs, fruits and vegetables should be treated

with respect and handled with care. When an egg is dropped it is crushed and there is no recovery. When apples, peaches, tomatoes and such are dropped, the injury is not readily apparent and shows much later in the form of poor sales appeal or is revealed to the customer after reaching her home. Repeat sales are often lost because of this.

Regarding rough handling of produce, the U.S.D.A. Handbook, Maintaining Produce Quality In Retail Stores, (18) states, "The seriousness of rough handling of fresh produce cannot be overemphasized. Rough handling, whether occurring in the field, in and out of packinghouses, trucks, railroad cars, wholesale produce houses, or in the retail stores, may result in considerable damage to fresh fruits and vegetables. Throwing produce into picking or shipping containers, packing containers too tightly or too loosely, or dropping packed containers often result in serious damage to the quality and condition of the commodity. Too often produce that has received the best of care regarding temperature and moisture is so carelessly handled that badly bruised, cut, or broken and decayed specimens are found when the package is unpacked at the retail store.

Rough handling of produce during preparation for display and when removed from the racks at night and careless handling by customers frequently result in serious loss of quality. When produce is arranged on the display racks it should be placed, not thrown, into position. Throwing produce onto racks sometimes causes bruises and cuts that are not apparent at the time; it may become soft, discolored, and possibly decayed. Rough handling by the customer can be lessened to a considerable extent by arranging the produce on the racks so that selection can be made without digging into the display. Frequent picking-over of produce by customers causes such an accumulation of bruises and other injuries that the display suffers loss of quality and becomes unattractive."

On maintaining produce quality, the author of the Handbook makes the following statement: "Fresh fruits and vegetables displayed in retail stores are living on

'borrowed time'. Aging and other deterioration are continuous processes, the rate depending upon the commodity and the conditions under which it is held. Most fruits and vegetables are near or at their prime of life when harvested. They continue to live even after separation from the parent plants. The length of the post-harvest life depends largely upon temperature, moisture, and care in physical handling of the commodity. Cooking generally slows down aging and development of decay. Proper humidity aids in preventing loss of moisture that is essential to the living cell. Careful handling reduces unattractive bruises and broken skins that provide openings for decay organisms."

The most suitable temperatures for holding fresh fruits and vegetables, as suggested in the Handbook, are presented in Table 71 as follows:

Table 71. Suitability of Various Temperatures for Holding Fresh Fruits and Vegetables in Retail Stores.¹

Commodity	Produce Temperatures -- F			
	32° to 35°	40° to 50°	55° to 60°	65° to 75°
Apples	Best ²	Good	Fair	Too High
Apricots	Best	Good	Fair	Too High
Artichokes	Best	Good	Fair	Too High
Asparagus	Best	Fair to Good	Fair	Too High
Avocados, for ripening	Too Low	Too Low	Good	Best
Avocados, full ripe	Too Low	Best	Fair to Good	Too High
Bananas, for ripening	Too Low	Too Low	Too Low	Best
Bananas, full ripe	Too Low	Too Low	Best	Too High
Beans, snap	Too Low	45°-50° Best	Good	Fair
Beans, lima	Best	Good	Fair	Too High
Beets	Best	Good	Fair	Too High
Berries (strawberries, (raspberries, black- berries).	Best	Fair to Good	Fair	Too High
Broccoli, sprouting	Best	Good	Too High	Too High
Brussels sprouts	Best	Good	Fair	Too High
Cabbage	Best	Good	Good	Fair
Carrots	Best	Good	Fair	Too High
Cauliflower	Best	Good	Fair	Too High
Celery	Best	Good	Fair	Too High
Cherries	Best	Fair to Good	Fair	Too High
Collards	Best	Good	Fair	Too High
Corn, sweet	Best	Fair	Too High	Too High
Cranberries	Too Low	Best	Good	Fair
Cucumbers	Too Low	Best	Good	Fair to Good

(cont'd on following page)

Commodity	Produce Temperatures -- F			
	32° to 35°	40° to 50°	55° to 60°	65° to 75°
Dates	Best	Good	Good	Fair
Eggplant	Too Low	Best	Good	Too High
Endive, escarole	Best	Good	Fair	Too High
Figs, fresh	Best	Fair to Good	Fair	Too High
Grapefruit	Good	Good	Good	Fair to Good
Grapes	Best	Good	Fair	Too High
Kale	Best	Good	Fair	Too High
Leeks, green	Best	Good	Too High	Too High
Lemons	Good	Best	Good	Fair
Lettuce	Best	Good	Fair	Too High
Limes	Too Low	45°-50° Best	Good	Fair
Mangoes	Too Low	Fair	Best	Fair
Melons for ripening	Too Low	Too Low	Good	Fair
Melons, full-ripe	Too Low	Best	Fair to Good	Too High
Mushrooms	Best	Fair	Too High	Too High
Nectarines, for ripening	Too Low	Too Low	Fair to Good	Best
Nectarines, full ripe	Best	Good	Fair	Too High
Okra	Too Low	Best	Fair	Too High
Onions, dry				
Onions, green	Best	Fair	Too High	Too High
Oranges	Best	Good	Good	Fair to Good
Parsnips	Best	Good	Good	Fair
Peaches, for ripening	Too Low	Too Low	Fair to Good	Best
Peaches, full-ripe	Best	Good	Fair	Too High
Peas, green	Best	Fair to Good	Too High	Too High
Pears, for ripening	Too Low	Too Low	Good	60° to 70° Best
Pears, full-ripe	Best	Good	Fair	Too High
Peppers, green	Too Low	Best	Fair	Too High
Persimmons, for ripening	Too Low	Fair	Good	Best
Persimmons, full-ripe	Best	Good	Fair	Too High
Pineapples, for ripening	Too Low	Too Low	Fair	Good
Pineapples, full-ripe	Good	Best	Fair	Too High
Plums (including prunes), ripe	Best	Good	Fair	Too High
Potatoes				
Pumpkin and winter squash	Too Low	Too Low	Best	Good
Squash, summer (soft- skin type)	Fair to Good	Best	Fair	Too High
Radishes	Best	Good	Fair	Too High
Rhubarb	Best	Good	Fair	Too High
Shallots	Best	Fair	Too High	Too High
Spinach	Best	Fair to Good	Too High	Too High
Sweet potatoes	Too Low	Too Low	Best	Good
Tangerines	Best	Good	Fair	Too High
Tomatoes, for ripening	Too Low	Too Low	Fair to Good	60° to 70° Best
Tomatoes, full-ripe	Good	Best	Fair	Too High

(cont'd on following page)

Commodity	Produce Temperatures -- F			
	32° to 35°	40° to 50°	55° to 60°	65° to 75°
Turnips	Best	Good	Good	Too High
Rutabagas	Best	Good	Good	Good

¹Recommendations are for produce displayed on racks in retail stores a maximum of about 4 days and for storage of reserve stocks for less than 1 week.

²Explanation of terms used:

- a. Best, most desirable temperatures
- b. Good, satisfactory temperatures for 3 or 4 days' display
- c. Fair, satisfactory temperatures for 1 or 2 days' display
- d. Too Low, produce subject to chilling injury
- e. Too High, produce subject to rapid aging and decay.

Record Keeping

Keeping records on the roadside market is important, and, indeed, essential if the operator wants to know what the business is doing. Records provide the answers. In roadside marketing, as in other businesses, many failures have doubtless been caused by the lack of proper records. An adequate set of records provides four types of basic information for the roadside market operator as follows:

1. Provides a measure of actual profits or losses.
2. Furnishes a guide for sound marketing practices.
3. Indicates the progress being made by the market.
4. Provides information for computing the various types of taxes, insurance rates, etc.

Records of roadside market operations need not be elaborate. Many market operators use a simple note book or account book purchased at a dime or stationery store. Donaldson and Johnstone (12) in their handbook present an example of a very good, simplified record keeping system for roadside markets.

In discussing record keeping for market operators at the second annual roadside marketing conference in Ohio, Myron Uretsky (20) said, "A set of books can range from a small notebook up to an elaborate double entry system or going even further up to an electronic computer. But the thing that we have to keep in mind is the

fact that your bookkeeping system must be able to meet the needs of the user and no further. There is no sense in investing a couple of thousand dollars in an elaborate bookkeeping system if you are not going to take advantage of it or even if you don't need it. We have many large accounts in New York City, using small notebooks, an ordinary notebook you buy at the five and dime store in which they record the essential items of their transactions, total cash receipts and what few cash expenditures they make. The purpose of keeping a set of books to some persons is just playing with tax regulations and yet other people keep almost nothing and get away with tax regulations. Keeping a good set of books will show how well you manage and should show the amount and cost of your revenue. It should show the direct cost of producing revenue and the cost of whatever products you sell. You will be able to see whether or not certain lines are profitable. It might be better to eliminate them altogether."

Uretsky goes on to explain the three general methods of accounting available to the roadside market operator under the internal revenue code. These methods are:

1. Cash receipts - cash disbursements method in which no inventory is needed.
2. The accrual method - where a set of records is a necessity to meet the requirements of the internal revenue code.
3. Using any method of accounting available which clearly reflects income and consistently applies from period to period.

At the same roadside marketing conference in Ohio (19) C. William Swank discussed workman's compensation, liability, and other business insurance for the roadside market operator. In this discussion the following points were brought out:

1. All roadside market operators need to carry workman's compensation.
2. In Ohio, if you employ three or more persons at your market, you must carry workman's compensation.
3. If the employees are less than three you may carry workman's compensation. And it's to the operator's advantage to do so.

4. Roadside market operators need to carry liability insurance to cover their customers, because the customers are invited. You invite them, by the use of signs, to stop at your market.
5. The usual farm liability insurance policy will cover the roadside market operation, if it has an endorsement to that effect.
6. Safe entrances, parking space, and exits need to be provided to prevent the market operator from being held liable in case of auto accidents.
7. A good set of records need to be kept on the roadside market operation, especially for workman's compensation purposes.

Characteristics of the Customers

When operating a roadside market it is important that the operator know his customers. Roadside markets attract a variety of customers with different demands. A market operator should recognize this, know the demands of the different types of customers and strive to satisfy them.

In the Vermont study (23) 200 customers were interviewed and divided into five occupational groups for analysis and comparison purposes as follows: professional, semi-professional (government and clerical workers), tradesmen (skilled workers, salesmen, and merchants), laborers, and housewives. The study revealed that nearly all housewives and about two-thirds of the laborers and semi-professional workers stopped to purchase fruits and vegetables, while more than one-half of the professional workers stopped for maple products. The demands of tradesmen emphasized variety rather than individual commodities.

The customers in the Vermont study were also classified according to place of residence. Nearly one-half of them were out-of-state customers, more than one-third local people, and the remainder from within the state but not local. The findings revealed that commodity preferences varied with the distance customers had to travel. Customers having long distances to travel did not prefer to buy fruits and vegetables because of their perishability (Table 72). They preferred such things as maple products for gifts and could be easily transported.

Table 72. Relation of Residence to Farm Products Demanded by 200 Consumers at a Particular Roadside Market, Vermont, 1949

Residence	Fruits (%)	Vegetables (%)	Maple Syrup (%)	Look Around (%)
Out-of-state	14	17	52	17
Local	23	63	7	7
In-state	13	41	13	33
All Consumers	35	30	22	13

Not all the buyers patronizing the Vermont roadside markets were regular customers. The study showed that two out of every three patronized roadside markets frequently. One out of every four was an occasional buyer and only one out of every eight bought at roadside seldom, if ever (Table 73). All local customers patronized roadside markets occasionally or frequently, while about one-fifth of the other two groups seldom purchased at such markets.

Table 73. Relation of Residence to Patronization at Roadside Markets, Vermont, 1949

Patronization	Frequently (%)	Occasionally (%)	Hardly ever (%)
Out-of-state	52	30	18
Local	90	10	0
In-state	46	30	24
All Consumers	63	24	13

The author of the New Hampshire study (27) divided the customers of 165 roadside stands into four classifications for analysis of their patronage characteristics as follows:

1. Local people--those who live in the vicinity of the stand, roughly within two or three miles.
2. Nearby people--those in surrounding communities, who can get to the stand fairly easily with auto transportation.
3. Summer trade--persons who take up summer residence in the area.
4. Transients--customers who travel considerable distances and pick up products as they travel. They are usually not regular buyers.

An analysis of the shopping habits of the customers revealed 78.8 percent of all sales being made to people who live near or within shopping distance (Table 74). Only 21.2 percent of the customers were transients. Farmer markets had less transient customers (15.9 percent) than the commercial markets (27.7 percent).

Table 74. Type of Customer Trading at Roadside Stands as Percent of Total Trade in Each County, New Hampshire, 1957

County	Local	Nearby	Summer	Transients
Percent				
Belknap	29.2	22.9	44.2	3.7
Carroll	14.4	5.7	62.1	17.8
Cheshire	25.8	31.6	33.6	9.0
Grafton	11.4	21.4	31.4	35.8
Hillsboro	15.6	54.3	1.9	28.2
Merrimack	24.2	37.1	19.2	19.4
Rockingham	26.5	31.0	14.7	27.7
Strafford	43.0	27.3	5.0	24.7
Sullivan	<u>34.3</u>	<u>41.0</u>	<u>21.1</u>	<u>3.6</u>
State Average	25.9	34.0	18.9	21.2

Counties in New Hampshire where people moved in for vacations and summer living received the highest percentage of sales to summer residents. Counties with lakes and mountains were highest in this respect. These counties were generally low in transient sales with the exception of one county where one large market did 75 percent of its business with transients returning from the mountains. The author concluded that the type of customer had some influence on the variety of items on sale at the stands.

In the South Carolina study (6), using the experimental roadside peach market, customer interviews were conducted for one week each in 1956 and 1957. The customers were selected at random and interviewed after making their purchases and before leaving the market. A total of 545 customers were interviewed during the two weeks. Of those interviewed 306 were classified as local in-state customers, 113 as non-local in-state customers, and 126 as out-of-state customers. Of the

306 local customers, 164 had made purchases at the market during the previous 4 weeks. Of the 113 non-local in-state customers, 32 had stopped previously to make purchases. Only 4 of the 126 out-of-state customers were repeat customers. Out of the 200 repeat customers, 177 stated that they returned to make additional purchases because they had been satisfied with the quality of the fruit purchased previously, 12 said they came back because of convenience, 7 because of the courteous service received, 3 because they could rely on the uniform quality of the fruit pack, and 1 because of price.

The 545 customers were asked what had initially caused them to stop at the market. Their replies are summarized in Table 75. Roadside signs ranked first in importance, followed in order by advice of friends and neighbors, display of fruit, and the known affiliation of the market with Clemson College. It was noted that there were considerable differences in the relative importance of these factors between the customer groups.

Table 75. Factors Which 545 Customers Reported Influenced Them to Stop and Shop, Experimental Roadside Peach Market, South Carolina, 1956-1957

Factors	Local in-state customers		Non-local in-state customers		Out-of-state customers		All Customers	
	No.	%	No.	%	No.	%	No.	%
Roadside signs	44	13.1	23	18.7	88	61.6	155	25.8
Friends, neighbors and relatives	133	33.6	18	14.6	4	2.8	135	22.4
Display of fruit	49	14.6	27	22.0	19	13.3	95	15.8
Appearance of market	35	10.4	21	17.1	20	13.9	76	12.6
Market affiliated with Clemson College	57	17.0	26	21.1	6	4.2	89	14.8
Miscellaneous	38	11.3	8	6.5	6	4.2	52	8.6
Total*	336	100.0	123	100.0	143	100.0	602	100.0

*Some customers gave two factors

In addition, each of the 545 customers was asked "what causes you to stop and shop at other roadside markets?" The major factors reported were expectation of high quality and freshness, appearance of the market, service and courtesy, display of product, and price. Other factors also given were location, reliability, variety of products, and highway signs. Quality and freshness of the products, appearance of the market, service and courtesy, display of product, and price were apparently the factors that influenced repeat business.

Customers in the Delaware study (14) who stopped at roadside markets gave freshness and price as their main reasons for shopping. People who did not shop frequently at roadside markets listed inconvenience, limited variety, sanitation, and lack of ample parking space as the factors influencing their decisions to shop less.

Hauck and Herschler (16) interviewed 1744 families selected at random in 10 areas of Columbus, Ohio, regarding purchases made at roadside markets. It was discovered that each of the areas furnished some customers who patronized roadside markets, although only 25 percent of those interviewed shopped such markets. In the poorer section of the city only one family in eight did any shopping at roadside stands. The wealthy residential areas furnished the largest percentage of patrons and they made the largest purchases per family. The largest total purchases at roadside markets were made by residents of the medium-class districts because of the much larger number of people living in such areas.

The authors, in discussing the replies of the Columbus customers, made the following statement:

"Three-fourths of the families reporting purchases at roadside markets bought only when it was convenient or incidental to business or pleasure trips. They made no special efforts to obtain supplies from this type of market, and they were just as likely to patronize one market as another. Only one-fourth reported buying more or less regularly at certain definite roadside stands. Almost all of these patronized stands not farther than 10 miles from their homes, and the majority

drove not more than 5 miles. Obviously, locations near centers of population attract greater repeat patronage than more distant ones.

It was noted also that two-thirds of the buyers who patronized roadside markets had no preference for dealing with farmers. These consumers were just as ready to buy from non-farmers or dealers as from bona fide producers. Their interest in securing fresh produce of good quality, at reasonable prices, and with the least inconvenience overshadowed all other factors in determining where their food purchases were made. Almost all of the remaining customers of roadside markets expressed a preference for dealing with farmers, either in the hope of obtaining fresher produce or of eliminating part of the middleman's margin. An occasional buyer preferred to buy from non-farmers' stands, stating that these dealers usually offered a wider selection and better display of goods and were more business-like in their dealings than farmers."

The 370 patrons interviewed in Columbus, who reported shopping at roadside markets, were asked their reasons for patronizing these markets. Their replies are summarized in Table 76. Some gave more than one reason, therefore the number of replies exceeds the number of persons interviewed. There were 448 replies. Freshness of produce was the most important factor in attracting customers, with convenient service ranking second, and attractive appearance third. It is significant to note that price ranked only fourth as a factor influencing customers to buy at roadside stands.

Table 76. Reasons for Patronizing Roadside Markets Offered by 370 Columbus, Ohio, Patrons, 1932

Reason	No. of replies	Percent of total	Reason	No. of replies	Percent of total
Fresher goods	222	49.5	To buy quantities	5	1.1
Convenient service	99	22.0	Cleanliness	3	0.7
Better quality	36	8.0	Neatness	3	0.7
Attractive app.	34	7.7	Home-grown	3	0.7
Cheaper	31	7.0	To buy from friends	1	0.2
Better selection	10	2.2	Honest weight	1	0.2
			Total	448	100.0

In the East Cleveland Farmers' Market study (22) Smith and Cravens reported that about two-thirds of the customers shopping at the market lived within two miles (direct line distance), and about 30 percent lived from two to five miles from the market. Most of the remaining 4 or 5 percent of the customers resided between 5 and 10 miles from the market. These data were obtained from random sample interviews conducted with 184 customers who shopped at the market during the week of June 16 through 21, 1959.

The study also revealed that 50 percent of these customers had shopped at the Farmers' Market for 15 years or more (Table 77). Only 16.8 percent had shopped less than five years, and slightly over 12 percent of the customers had shopped for 35 years or more.

Table 77. Number of Years Shopping at East Cleveland Farmers' Market 137 Customers

Number of years	Number of Customers	
	Number	Percent
Under 5	23	16.8
5 - 9.9	27	19.7
10 - 14.9	19	13.9
15 - 19.9	18	13.1
20 - 24.9	16	11.7
25 - 29.9	12	8.8
30 - 34.5	5	3.6
35 and over	17	12.4
Total	137	100.0

The number of visits per year by the customers of the Farmers' Market ranged from 5 to 105 (Table 78). Approximately 50 percent of the customers shopped fifty or more times at the market during the preceding year.

The customers reported more frequent visits to the market in the summer than for any other season of the year followed in order by fall, spring, and winter. At least 70 percent of the customers visited the market one or more times per week during each season except winter. Only 42.3 percent of the customers visited the

market weekly or more frequently during the winter months. All customers reported visiting the market at some time during the summer; while 9.5 percent did not shop in the spring, 8 percent in the fall, and 25.6 percent did not shop at the market during the winter. Occasional shopping was found to be greater in winter at the market than during any other season.

Table 78. Number of Visits by Customers to East Cleveland Farmers' Market in the Preceding Year

Number of Visits	Number of Customers	
	Number	Percent
0.0 - 9.9	8	5.8
10.0 - 19.9	17	12.4
20.0 - 29.9	19	13.8
30.0 - 39.9	13	9.5
40.0 - 49.9	12	8.8
50.0 - 59.9	29	21.2
60.0 - 69.9	8	5.8
70.0 - 79.9	15	10.9
80.0 - 89.9	2	1.5
90.0 - 99.9	2	1.5
100.0 and over	12	8.8
Total	137	100.0

In the Oak Glen, California, study (24) significantly more of the customers who came to the market specifically to buy apples purchased over 40 pounds of apples than was true for those who purchased as a result of recreational reasons. This was not related to the distance traveled.

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