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HARRY VROOMEN
JAMES G. BEIERLEIN
CATHLEEN M CONNELL

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Harry Vroomen, James G. Beierlein, and Cathleen M Connell*

Department of Agricultural Economics and Rural Sociology
The Pennsylvania State University

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*Research Associate, Associate Professor, and Research Associate, respectively, Department of Agricultural Economics and Rural Sociology, The Pennsylvania State University. Special thanks is extended by the authors to Tom Brewer, Robert Herrmann, Lou Moore, Aubrey Vose, and Rex Warland for their assistance in developing the roadside market questionnaire. Appreciation is also expressed to Martin Gonzalez, numerous cooperative Extension Agents througout the state, and Pennsylvania Farmer's Association for their assistance in developing the mailing list used in the study. Finally, the authors would like to thank the Pennsylvania Department of Agriculture for administering the funds neccessary to support this research.

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PENNSYLVANIA ROADSIDE MARKET SURVEY 1984

Abstract

Number, size, location, and operating characteristics of 182 roadside farm produce markets in Pennsylvania were determined by postal survey. Questionnaires were mailed to 353 roadside market operators; 182 (51.6 percent) responded.

Nearly all respondents indicated that the market operator or an immediate family member operated a farm. Most of the markets were operator owned; about 80 percent were located on the farm. A major portion of the markets were located in permanent buildings. Although many of the operators surveyed have been in operation for longer than 25 years, almost 45 percent have been established since 1970.

September was the busiest month for roadside market operation. Most operators were open for business in September; August, October, and July were the next busiest months. July through October were also the peak selling months. Roadside sales, per market, were generally highest in August, followed by October, July, and September, respectively.

Roadside markets in Pennsylvania generally operate six or seven days a week. Sunday was usually the day of closing for markets that operate six days a week. Saturday was reported to be the busiest day of the week in terms of total market sales, followed by Friday, Sunday, Thursday, and Monday, respectively.

Approximately one-third of the respondents reported annual gross sales of less than $20,000. An additional 40 percent indicated sales in excess of $20,000, but less than $100,000. Nearly 27 percent of the markets reported gross sales exceeding $100,000.

Most roadside markets in Pennsylvania sell fruits and vegetables, but some smaller markets specialize in selling only one or the other. Overall, gross sales from fruits exceed those from vegetables, although vegetables were more important to many of the markets reporting sales of less than $15,000 per season. Sweet corn, in terms of retail dollar value, was reported to be the leading product at many roadside markets.

Next in total sales were apples, tomatoes, peaches, potatoes, strawberries, beans, cantalopes, cider, and peppers. Other products listed among the top ten items in some sales groups and regions of the state included pumpkins, flowers/plants, pears, baked goods, cucumbers, eggs, plums, cherries, raspberries, squash, broccoli, cauliflower, dairy products, and honey.

On the average, operators who respondents reported growing 60.5 percent of the fruit they sold, and purchasing 21.3 percent from wholesalers and 18.2 percent from local farmers. Respondents reported growing 71.9 percent of the vegetables they sold, and purchasing 14.4 percent wholesale and 13.7 percent from local producers. Many operators offered other items for sale. Approximately 40 percent of the roadside markets sold flowers and/or bedding plants, and 17.6 percent sold dairy products.

Markets with high sales volumes require greater amounts of labor than smaller markets. Markets that sold less than $5,000 per year required an average of 60 hours of labor per week while those selling $1 million or more required twenty times that amount.

More than 44 percent of the operators reported pricing their produce lower than that sold in local retail stores; 40.4 percent reported pricing their products at about the same level. Less than 11 percent of the operators said they priced their produce higher than retail prices at local food stores. Methods used by market operators in setting prices included "making their own price," "cost of production plus markup," and "prices charged by competitors other than local supermarkets."

Most operators reported customer relations and word of mouth to be their primary form of advertising; however, 78 percent purchased newspaper advertisements or radio time. Advertising expenditures ranged from zero to $62,000 per season. Based on all markets reporting, advertising expenditures averaged 2.08 percent of sales. Roadside marketers depended rather heavily on roadside signs, signboards attached to the market facility, and point-of-sale messages. Container and package labels were also frequently used.

Almost half of all markets were located within two miles of the nearest population center thought to supply the major proportion of their customers. More than 81 percent of all markets were located within five miles of a population center. For about one-fourth of all markets, the nearest town or city had fewer than 5,000 inhabitants. For three-fourths of the markets, the nearest town or city had fewer than 50,000 inhabitants. Only 14 percent of the markets reporting were located near towns or cities of more than 100,000 inhabitants.

Market operators were asked to report the average number of customers visiting their markets in spring, summer, and fall. The average number of customers per week for all markets reporting was 358, 421, and 375 for the spring, summer, and fall seasons, respectively. The average purchase per price customer was $6.27 in the summer and $6.70 in the fall.

Operators reported an average of 1.5 competitors within one mile of their market locations. Some operators reported no competitors within this distance, while others reported as many as ten. The number of competitors within a five-mile radius ranged from 0 to 50; the average was 6.2 per market. Operators estimated an average of 18 competitors within ten miles of their locations.

When asked about earnings from market operations in relation to total family income for 1983 and 1975, operators reported that 1983 market operations provided nearly 45 percent of family income, an increase of about 5 percent compared to 1975. Income from other farm business was reported by 56 percent of the operators, and 43.3 percent reported nonfarm income.

Overall, the operators who participated in this study spoke optimistically about the future of their markets. About 43 percent of the respondents reported feeling 'very good' about their future, and 35 percent reported 'good' expectations. Of the remainder, nearly 15 and 3 percent reported their expectations for their markets to be 'fair' and 'bad', respectively.

INTRODUCTION AND BACKGROUND

Direct farm marketing has been adopted as a business alternative by a number of Pennsylvania fruit and vegetable producers. Justification for establishing a direct-marketing program has been based primarily on the producer´s desire to increase farm income. Farmers receive an average of about 35 cents of each dollar spent by consumers for a typical market basket of farm foods purchased in the supermarket. The difference between the retail price and the price the farmer receives represents the costs of marketing services which includes processing, transportation, and distribution. By selling products directly to consumers, farmers provide some of those marketing services. Consequently, they receive a larger portion of the consumer´s food dollar.

The type of marketing services that grower´s provide depends on the method of marketing. For example, producers that operate mobile markets or deliver products to consumers homes provide nearly all marketing services. Producers that sell their products at farmers markets or operate a roadside market also provide most services, with customers providing their own transportation to and from the market. The producer provides fewer marketing services in the pick-your-own operation. Using this type of marketing strategy, consumer harvests the product at the farm and performs many of the middleman´s tasks.

Of all of the direct-marketing methods, roadside marketing is the most widely-used in Pennsylvania in terms of fruit and vegetable sales. Roadside markets accounted for 46.2 percent of all the direct-marketed vegetable sales and 38.8 percent of all the direct-marketed fruit sales in 1978 (Henderson and Linstrom, 1980). The present study was undertaken to obtain information about the operating charactersitics of roadside markets in Pennsylvania. Results from this study will enable operators and policy makers to better understand this industry.

PROCEDURE

A survey of roadside-market operators was conducted during the summer of 1984 to obtain detailed information on the current operating characteristics of roadside markets in Pennsylvania. The Pennsylvania Department of Agriculture (PDA), The Pennsylvania Farmers Association (PFA), selected cooperative extension agents, and faculty in the Agricultural Economics and Rural Sociology Department at The Pennsylvania State University were consulted in the selection of content and in developing the questionnaire.

The questionnaire was drafted and tested via a personal interview with a roadside marketer. After some modification, a second draft of the questionnaire was prepared. This second draft was tested with the assistance of PFA, who supplied a cover letter supporting our efforts and a mailing list of twenty roadside market operators located throughout Pennsylvania. Fourteen of these twenty test questionnaires were returned and the answers and comments received were analyzed. From this analysis, a final draft of the questionnaire was developed (Appendix A).

An up-to-date list of roadside markets was essential to insure the most complete sample possible. An important step in this process was to define a roadside market and distinguish it from other marketing methods. The working definition of a roadside market used in this study was "a market where fruits and/or vegetables and related products are sold from a temporary or permanent stand or building located beside a road or highway." Next, Cooperative Extension agents familiar with specific markets were asked to decide whether or not particular markets should be included in the final mailing list. Additionally, regional mailing lists supplied by various Cooperative Extension agents and a pamphlet entitled "A Consumer's Guide To Direct Marketing," published by PDA were used to develop the sample of markets.[1] The final list was verified by Extension personnel from several counties in Pennsylvania. Markets no longer in operation and those considered by the agents to be more representative of farmers markets or pick-your-own operations were excluded. Roadside-marketer operators not previously listed were also included.

The final list included 398 markets and is believed to be the most complete directory of roadside markets in Pennsylvania. The roadside market questionnaire, accompanied by a cover letter and a postage-paid return envelope, was mailed to 384 roadside-market operators on July 23, 1984.[2]

Following the initial mailing, standard survey techniques were used to elicit a higher response rate (Dillman, 1978). These included: (1) a follow-up post card one week after the initial mailing, (2) a follow-up cover letter and questionnaire which was sent to all nonrespondents three weeks after the initial mailing, and (3) a final follow-up letter which was sent to nonrespondents five weeks after the initial mailing.

Thirty-one were returned by respondents who were no longer, or had never been, roadside marketers (i.e., some reported that they had retired, had gone out of business, or now sold their produce through other channels). Thus,

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[1] Consumer Guides from 1981 and 1982 were used in addition to the more recent 1984 Guide because they included some active roadside markets which were not listed in the 1984 Guide.

[2] Questionnaires were mailed to 384 markets, or 398 less the 14 who returned the draft version of the questionnaire.

the final sample includes presumably active roadside markets throughout the state. (The number of active roadside markets by county and Crop Reporting District are shown in Figures 1 and 2, respectively).

A total of 182 questionnaires were returned, representing a response rate of 51.6 percent.[3] The number of questionnaires sent to each Crop Reporting District, the number of questionnaires returned, and the response rate are reported in Table 1. Since the response rate was fairly uniform across Crop Reporting Districts, the data reported here is thought to accurately reflect roadside markets in Pennsylvania for 1984.

GENERAL CHARACTERISTICS OF ROADSIDE MARKETS

Facilities for roadside marketing range from a small table on the front lawn to structures approaching the size of a supermarket. The size and type of facility used is generally determined by the type of produce handled and the volume of business. The length of time the market is in operation, whether seasonal or year round, also influences the kind of facility needed.

Most respondents (86.7 percent) used a permanent building for their sales operations. Ten percent of the operators used temporary facilities and 3.3 percent of the respondents indicated their sole facility was either a table on the front lawn or their garage.

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[3] Most respondents answered all of the questions on the survey. Therefore, each of the 182 returned questionnaires were used in the analyses. However, since some respondents did not answer every question, the analysis for a particular question may be based on less than 182 responses. For example, 23 operators either did not know or would not disclose the gross volume of their roadside market's sales.

Sales area for all markets reporting is approximately 1500 square feet. The markets also provided parking facilities for an average of 23 automobiles. Table 2 shows the average sales area and number of parking spaces provided by each sales group. As expected, both the sales area and the number of parking spaces provided increased with gross sales. Markets with annual gross sales in excess of $250,000 have an average sales area of over 4,000 square feet and provided an average of 38 parking spaces. Markets with gross sales of less than $5,000 have a sales area of 130 square feet and supply 11 parking spaces, on the average.

Many of Pennsylvania's roadside markets have been in operation for several decades, with some dating back to the early 1800's. Although many of the markets surveyed have been in business over 25 years, 83 percent have been established since 1950, while almost 45 percent have been in operation since 1970. Approximately 15 percent of the markets surveyed have opened within the last five years, suggesting that an increasing number of Pennsylvania producers believe roadside marketing is a profitable way to add to their farm income. Table 3 shows the number of markets in each sales group and the year they first opened.

Most roadside-marketing facilities are owned by the operator, and approximately 80 percent are located on farms. The 33 markets not located on a farm are from one-quarter mile to twelve miles away with an average distance of approximately 3 miles from farm to market.

Operators' experience in selling produce directly to consumers varied from less than one to 74 years with an average of 23.9 years. While less than 10 percent were new operations, with one to four years' experience, 16.5 percent of the operator's had been selling for at least forty years (Table 4). Almost two-thirds of all respondents indicated that they had 10 to 39 years of experience selling directly to consumers.

In addition to selling produce at the markets they operate, many owner-operators gained experience in the marketing of farm produce in other ways. More than 70 percent indicated that they grew up on farms operated by their parents or other relatives where produce was sold directly to consumers. Eight percent of the operators reported earlier experience as an employee at a direct-marketing farm outlet. Eleven percent of the operators indicated they gained experience related to the marketing of farm produce in a pick-your-own operation, farmers market, supermarket, greenhouse, produce warehouse, door-to-door sales, restaurants, seasonal retailing, or as a 4-H leader or agricultural teacher.

SEASON LENGTH AND OPERATING DAYS

Length of Market Season

Market operators were asked to report the months during which their markets are normally open. Almost half of those responding reported being open for six months or less, and about a fourth were open year round. As expected, markets with high sales generally had a longer selling season (Table 5).

September was the month during which the largest proportion of market operators reported normally being open for business, followed by August, October, and July (Table 6). As expected, the months of July to October were also the peak selling months. August was reported most frequently as the month during which roadside market sales were generally the highest, followed by October, July, and September, respectively.

Operating Days

Roadside markets in Pennsylvania generally do business six or seven days a week (Table 7). More than one-half of the markets reported operating every day of the week during the Summer and Fall, while more than 81 percent were open at least six days during these seasons. About 55 percent of the markets reported operating during the Spring. More than half of these markets were also open seven days of the week, while about 84 percent were open for at least six days. Approximately seven percent of the markets which operated in the Spring were open for only three days a week.

Sunday was the most usual closing day for those markets which operated six days a week. Markets operating only three days were generally open from Thursday through Saturday or Friday through Sunday. Saturday was reported to be the busiest day of the week, in terms of total market sales for the Spring, Summer, and Fall. It was followed by Friday, Sunday, Thursday, and Monday, respectively. Thus, as expected, roadside markets do most of their business on and near the weekend.

PRODUCTS SOLD

Most roadside markets in Pennsylvania offer fruits and vegetables for sale while some of the smaller markets specialize in either fruits or vegetables alone. Ten market operators indicated that they sold only fruit, while 93.8 percent had some fruit available for sale. Eight markets reported offering only vegetables for sale while 87 percent had some vegetables available. Both fruits and vegetables were offered by 81.4 percent of the responding markets.

Overall, roadside markets generate a larger proportion of their gross sales from fruits than from vegetables. However, vegetable sales are more important for markets with gross sales of less than $15,000 (Table 8). On the average, 47.5 percent of a market's sales are from fruits, 38.8 percent are from vegetables, and 13.7 percent are from the sale of other products. Products other than fruits and vegetables are generally more important to the larger markets which usually carry a broader selection of both produce and non-produce items than do smaller markets.

Principal Products

Market operators were asked to list the ten principle products they sold in 1983, according to dollar value of retail sales. Some markets listed less than ten items while others listed a wide assortment. Over 70 different products were listed. The relative frequency with which products were reported by region and by sales group are shown in Tables 9 and 10, respectively.

Corn was reported to be the leading product in seven out of the nine crop reporting districts and in all sales groups but one, where it was second only to apples. Overall, corn and apples were followed by tomatoes, peaches, potatoes, strawberries, beans, cantalopes, cider, and peppers. Some other products which were among the top ten products in some regions and sales groups included pumpkins, flower/plants, pears, baked goods, cucumbers, eggs, plums, cherries, raspberries, squash, broccoli, cauliflower, dairy products, and honey.

Sources of Fruit

About 31 percent of the market operators that reported their fruit sources indicated that they grew all of the fruit they sold, while the remainder puchased at least some fruit for resale (Table 11). As expected, the proportion of total fruit sales grown by the operator was directly related to the size of the market; the proportion of fruit sales grown decreased considerably as the gross sales of the market increased. However, even markets with annual sales of over $250,000 grew an average of 46 percent of the fruit they sold. Overall, operators reported growing an average of 60.5 percent of their fruit while purchasing 21.3 percent wholesale and 18.2 percent from local farmers.

Sources of Vegetables

Approximately 29 percent of the market operators who reported their vegetable sources indicated that they grew all of the vegetables for their markets, while the remainder purchased at least some vegetables for resale (Table 12). As was the case with fruits, the proportion of total vegetables grown by the operator was directly related to the size of the market. The proportion of vegetable sales grown by the operator generally decreased as the gross sales of the market increased. However, even in those markets with gross sales exceeding $250,000, more than 43 percent of the vegetables sold was grown on the farm. Overall, operators reported growing an average of 71.9 percent of the vegetables they sold, purchasing 14.4 percent wholesale, and purchasing 13.7 percent from local farmers.

Other Products Offered for Sale

In addition to produce grown by the operator, many markets offer other items for sale. This practice enhances the market's product line and leads to increased sales. Market operators were asked to indicate if they sold meat, dairy products, or flowers and/or bedding plants at their markets. They were also asked to specify those products other than fruits and vegetables which they offered for sale.

Approximately 40 percent of the markets sold flowers and/or bedding plants, and 17.6 percent sold dairy products (Table 13). Other products commonly carried by roadside markets were honey (14.3 percent), jams and jellies (14.3 percent), and meat (12.1 percent).

Organic Products

Eighteen markets reported selling organic produce in 1983. Ten of these markets reported that from 1 to 10 percent of their total roadside sales were organic products, while six others reported their organic sales comprised 40 to 90 percent of their total sales. Two operators indicated that their roadside sales consisted solely of organic products.

Operators were also asked whether they grew or purchased the organic produce available in their markets. Half reported growing all of their own, and a third purchased these items. The other operators grew some and purchased some of their organic products.

Display Method: Bulk or Prepackaged

Market operators were asked how they displayed their produce -- in prepackaged lots (i.e. wooden or plastic baskets, bags, or other containers) or in bulk. In markets with gross sales exceeding $250,000, the majority of produce was sold in bulk. Markets selling less than $250,000 a year generally prepackaged a larger proportion of their produce (Table 14). On the average, 57.4 percent of all products were prepackaged, while 42.6 percent were displayed in bulk.

Most markets sold a combination of bulk and prepackaged products, but some used only a single method. Fourteen markets reported that they displayed all of their products in bulk, while 27 reported that they prepackaged all produce. Markets using only a single method had sales of less than $50,000. Markets with sales exceeding $50,000 a year generally handle a wider selection of products, requiring both methods of display.

GROSS SALES

Market operators were asked to report the gross volume of retail sales generated from their roadside-market operation for calendar year 1983. Of the 1982 operators who returned questionnaires, 153 reported this information. Another 12.6 percent either did not know or preferred not to disclose the level of their sales. The remaining 3.4 percent did not operate their markets in 1983.

Approximately one-third of the respondents reported that they sold less than $20,000 worth of merchandise annually, and 27 percent reported gross sales exceeding $100,000 (Table 15). The average sales level for all markets reporting in 1983 was $127,075; the median sales level was $40,000 to $49,999 (i.e. half of all markets reported sales at or below $50,000 while half reported sales at or above this level).

Operators were also asked to provide an estimate of how their sales had changed over time by indicating their annual gross sales levels for 1975, 1980, and 1983. (Table 16). Operators that reported sales for the three years revealed that in 1975 the average level of sales was $66,269; and the median level was $20,000 to $29,999. The average for these markets in 1980 was $105,934, and the median sales level was $40,000 to $49,999. In 1983, average sales rose to $139,962, but the median sales level remained within the $40,000 to $49,999 range.

These changes reflect a 9.8 percent annual compound growth rate of roadside sales from 1975 through 1983. Even after adjusting for inflation, the increase in average sales represents a 4.9 percent annual compound rate of growth for the period. Thus, on the average, there has been substantial growth in sales for the markets that have been in operation over the last decade.

Level of gross sales in 1983 was highest in the southern crop reporting districts. More than 60 percent of the markets in the three northern crop reporting districts reported sales of less than $30,000, while only 11.8 percent of the markets located elsewhere in Pennsylvania were in this category. Almost 15 percent reported sales levels exceeding $100,000; no market in the northern area reported such a sales level. Over 80 percent of the markets in the southern districts reported sales of $30,000 or over, while 46 percent reported sales in excess of $100,000.

Approximately 20 percent of the operators reported accepting food stamps. The proportion of a market's gross sales purchased with food stamps ranged from less than one percent to 30 percent; an average of 6.4 percent of all markets accepted food stamps.

LABOR

Operators wre asked to estimate the total number of hours, per week, required to operate their roadside market durings its peak season. The operator´s time and the labor directly required for roadside-market operations, such as purchasing, transporting, grading, sorting, packaging, displaying, selling, etc. was included in this estimate. Labor required for production and harvesting was not included in this estimate. The average number of hours of labor required per week for roadside market operations during the peak season, by sales, are reported in Table 17.

Markets with larger sales volumes required significantly more hours of labor than did small markets. This difference goes beyond the mere increase in dollar sales volume. During the peak season, markets with sales of $5,000 or less ($X^2$=56.35, df=12, $p < .0001$) required an average of 60 hours of labor per week. Markets selling $1 million or more required 20 times that amount. The average number of labor hours required per week for all markets during the peak season was 183.

Number of Employees

The number of full- and part-time family and non-family employees hired during the peak season of operation is listed in Tables 18 and 19. Most markets reported employing no more than three family members on a full-time basis, and less than two family members were typically employed on a part-time basis.

Most markets employed at least one family member on a full-time or part-time basis, and many markets also hired non-family employees. As expected, the number of full- and part-time non-family employees hired increases with the gross sales of the market. (However, this trend is statistically significant only for the part-time family employees, as can be seen in Table 18). Markets having gross sales of less than $30,000 have, at most, two full-time employees. On the other hand, more than half of the markets selling $250,000 or more hire at least three full-time employees. The same rule generally holds for part-time non-family employees (Table 19). When considering all markets reporting, 58.4 percent hired no full-time employees during the peak season; 45 percent hired no part-time employees.

PRICING

Previous studies have found quality, freshness, and price to be the most important reasons given by consumers for shopping at roadside markets (Blackburn and Jack, 1984; Pelsue, 1980; Zehner and Meldrum, 1969). In addition to purchasing farm-fresh produce, many people patronized roadside markets to obtain high-quality produce at prices lower or comparable to those at the supermarket. People will not patronize a market if its prices are out of line with prevailing retail prices. Yet, prices must be high enough to cover costs, or the market will operate at a loss. Product pricing must be based on sound economic principles and a thorough knowledge of market conditions.

To shed some light on the subject of pricing, roadside market operators were asked how their prices, compared to those of local retail (chain and independent) grocery stores (Table 20). Over 44 percent of the operators indicated that their prices were lower than those of local retail stores, and

40.4 percent reported that they price at about the same level as retail. Fewer than 11 percent of the operators reported their prices to be higher than retail. These responses suggest that Pennsylvania roadside market operators are well aware of the importance of price to the consumer.

Market operators were also asked to rank the various methods they used to price their produce. An average weighted score was computed for each price determination. A method was assigned a value of 1 if it was reported to be of no importance in determining the prices charged. Alternatively, a value of 5 was assigned to those methods deemed to be extremely important in determining prices (Table 21). The number of responses within each category were multiplied by the value of that category (1, 2, 3, 4, or 5) and the resultant values summed for each price determination method. This total, divided by the number of operator's responding to each method, determined an average weighted score for each method.

Respondents considered the following methods to be of greatest importance -- included 'making their own price,' 'cost of production plus mark-up', and 'prices charged by competitors other than local supermakets.' These methods received an average score of 3.38 to 3.58, indicating that they were between average and major importance in setting prices. The price setting method of 'last year's price adjusted upward' was rated of average importance, while the 'prices charged at local supermarkets' and 'price quotes from the Market News Service' were rated below average in importance.

Roadside market operators were asked if they compared prices with their competitors (Table 22). Approximately 40 percent of the operators indicated that they regularly compared prices; 53.6 percent compared prices occassionally. Only 6 percent of the operators did not compare their prices with those of their competitors. These percentages suggest that most market operators make some effort to keep up with local market conditions.

Operators were asked where they compared their prices (Table 23). Prices were compared most frequently with roadside markets (68.7 percent), grocery stores or supermarkets (63.2 percent), and Market Reports (61.5 percent). Approximately 45 percent of the respondents also checked prices at other farmer's markets.

ADVERTISING AND PROMOTION

Satisfied customers can often be the most effective and least expensive form of advertising. Approximately 88 percent of the surveyed market operators relied on customer relations and word of mouth as a form of advertising. However, 78 percent also purchased advertising, and believed it to be important to the success fo their markets.

Advertising expenditures ranged from $0 to $62,000 per year for the markets that purchased advertising in 1983 (Table 24). As a percent of sales, these expenditures ranged from 0 to 18.29 percent. The dollar amount available for advertising clearly depends on the level of retail sales; markets having higher sales generally spend more on advertising. The average amount spent by all markets reporting was $2,849, or 2.08 percent of sales. For individual markets, advertising expenditures as a percent of sales for the sales categories ranged from an average of 1.01 to 3.48.[4]

Roadside market operators depend rather heavily on local newspapers, roadsigns, and board signs attached to the market structure. Other methods commonly used were container or package labels and radio.

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[4]To calculate these averages, the midpoint of each sales interval was used; $1,250,000 was used for all markets with sales over $1 million, and $4,000 was used for all markets with sales under $5,000.

Table 25 summarizes the number of markets, by sales, using specific types of advertising. Duplication of methods frequently appears since many markets use more than one method of advertising. Some market operators also reported promoting their markets through business cards, give-aways, community bulletin boards, banners, and catalogs.

Roadside market operators promote various features of their markets through advertising. The most commonly report ad (80.2 percent) listed products currently available at the market (Table 26). Other ads featured directions to the market location (62.6 percent), opening dates and hours (61.0 percent), and farm freshness (product superiority) (57.7 percent). Only four market operators advertised price.

Operators were asked if Pennsylvania-grown produce was emphasized in their advertisements and, if so, whether the logo "Pennsylvania Agriculture - We´re Growing Better" was used for promotion. Half of those responding reported that Pennsylvania grown was "never" or "seldom" emphasized; 44% responded "always" or "generally." Over two-thirds of those operators who do emphasize Pennsylvania grown (65.3%) never use the Pennsylvania Agriculture logo. Less than one-fourth (22.1%) report that they "always" or "generally" use the logo.

Interesting patterns of response emerge, however, when comparing operators who report different levels of annual sales. Markets which report high sales are more likely to report that they always or generally emphasize Pennsylvania grown in their advertisements than operators with low sales (X^2=56.61, df=p $<$.0002). In terms of use of the logo "Pennsylvania Agriculture - We´re Growing Better", operators whose total sales in 1983 ranged from $5,000 to $100,000 were most likely to report that they "always" or "generally" used the logo. Operators reporting under $5,000 and over

$100,000 were very unlikely to use the logo.

CUSTOMERS

Market operators were asked to report the population center where the majority of their customers reside, the distance from their markets to these towns or cities, and the percent of business generated by shoppers from each of these towns or cities. Some operators estimated that 95 percent of their annual gross sales were generated by customers living in the nearest town or city, while others listed as many as four towns or cities as important sources of customers.[5]

Population of Nearest Town or City

The population of the town or city nearest to the markets reporting ranged from 507 to 1,688,210 inhabitants.[6] Approximately one-fourth of the markets were located nearest to towns or cities with populations of fewer than 5,000 inhabitants. Three-fourths of the markets were located nearest to towns or cities with less than 50,000 inhabitants (Table 27). Fourteen percent of the reporting markets were located nearest towns or cities with more than 100,000 inhabitants.

[5] The questionnaire provided space for each respondent to list four towns or cities.

[6] Population figures were obtained from the 1980 Census of Population.

Distance to Nearest Town or City

Distance to the nearest population center, as reported by the market operator, ranged from less than a mile to 25 miles with an average of 3.8 miles. Approximately half of all markets were within two miles of a town or city, with 28.7 percent located within one mile (Table 28). Over 81 percent of the markets were within five miles of a town or city; only 6.7 percent were located further than 10 miles from a town or city.

Percent of Business Generated by Nearest Town or City

Operators estimated that, on the average, 35.7 percent of their annual gross sales were generated by customers from the town or city nearest to their market. Approximately 23 percent of the operators estimated that less than 20 percent of gross sales were generated by customers from the nearest town or city. Two thirds estimated that less than 50 percent of their sales come from customers in these locations (Table 29). Only 5.9 percent of the operators estimated that at least 75 percent of their gross market sales were generated by customers from the nearest town or city.

Customers Per Week

Respondents estimated the average number of customers that shopped in their market weekly during the spring, summer, and fall seasons. As expected, the average number of customers per week who visit a roadside market is directly related to the gross sales of the market -- more customers, higher sales.

More than 80 percent of all operators indicated that they had at least 100 customers weekly (Table 30). Although there was some variation from season to season in the smaller sales groups, the number of customers who visited the average market each week was fairly constant. The average number of customers per week for all markets reporting was 358, 421, and 375 for the spring, summer, and fall seasons, respectively.

Average Dollar Purchase Per Customer

Respondents reported their estimates of the average dollar value of a typical customer purchase for the spring, summer, and fall seasons. In general, the average customer purchased increased as the total yearly sales of the market increased (Table 31). This result is not surprising as larger markets typically carry a wider selection of products. Subsequently, as one moves southward through the state a greater proportion of markets have high annual sales and the average customer purchase increases.

More than two-thirds of the operators indicated that customers spent between $2.00 and $7.99 during visits to their market during all seasons, with the largest number of purchases made in the $4.00 to $5.99 range (Table 31). Overall, customer purchases were fairly constant from season to season. The average for all markets reporting by season, was $6.68, $6.27, and $6.70 for spring, summer, and fall, respectively.

SURROUNDING COMPETITION

The roadside market operators were asked to estimate the number of competitors (roadside markets, farmers' markets, pick-your-own operations, supermarkets, etc.) within one, five, and ten miles of their operation.

Competition between markets appears to be somewhat stronger in the southwest and somewhat less in the northwest as indicated by the significant differences in the number of 1- and 10-mile competitors among reporting districts. (X^2=22.24, df=12, $p < .035$; X^2=17.85, df=9, $p < .037$, respectively.) No differences were found for 5-mile competitors among Crop Reporting Districts, however, (X^2=5.91, df=9, $p < .749$). The range of competitors reported by respondents are shown in Tables 32, 33, and 34.

Estimates of the number of competing markets within five miles of the respondent's location range from zero to 50, with an average of 6.2 competitors per market. Approximately 24 percent of the operators reported having two or less competitors within five miles, while almost two-thirds reported having less than seven. Only 10.4 percent of the operators reported more than ten competitors within five miles of their market location.

Reporting market operators estimated the number of competitors within ten miles of their location. Estimates ranged from 1 to 250 miles, with an average of 18 competitors per market. Approximately 24 percent of the operators reported five or less competitors within ten miles, and almost three-fourths reported 20 or less. Only 16.5 percent reported more than 20 competitors within ten miles of their operation.

INCOME SOURCES OF MARKET OPERATORS

Market operators were asked to indicate the approximate proportion of their total family income generated from sales at their markets in three specified years--1975, 1980, and 1983 (Table 35). The proportions reported ranged from very low to 100 percent. The weighted average for all markets in 1983 was 44.1 percent, indicating the importance of roadside market sales to the well-being of the average roadside market operator. The reports reveal that the average proportion of total family income generated from sales has increased from 39.6 percent in 1975 to 44.1 percent in 1983.

The proportion of total family income generated from roadside market sales increased as the total sales of the market increased (Table 36). Markets with sales of less than \$5,000 generated an average of 15 percent of their operators total family income, while markets with sales of \$250,000 or more generated an average of 67 percent.

While sales at the roadside market were an important source of income for the average operator's family, other income sources were important as well (Table 37). Approximately 83 percent of the operators indicated that their family received income from sources other than the roadside market in 1983.

Approximately 60 percent of the operators reported that their roadside market was their sole means of marketing their produce, while almost a third also sold some produce to wholesale buyers. Another 21.4 percent used a farmer's market, a pick-your-own operation, or wholesaling as an additional outlet. Thirteen percent used two of these additional outlets and 5.5 percent used all three as well as their roadside market. More than one-fourth (28.5 percent) of all operators reported receiving farm income from sources other than selling produce. Overall, 56 percent of the operators reported some type of farm income other than that generated from the roadside market.

Non-farm income was also important to the roadside market operator's family. In 1983, 43.4 percent of the operators had at least one source of non-farm income. Approximately one-fourth of the operators had off-farm employment and nearly one-fourth indicated that their spouses had some type of off-farm employment. In 11.6 percent of the cases, both the of the operator and his/her spouse had off-farm employment. Another 8.1 percent of the operators indicated that they received income from other sources, such as investments and Social Security.

OPERATORS' VIEWS ON ROADSIDE MARKETING

Reason for Establishing Market

Market operators were asked to state their main reason for establishing a roadside market rather than selling their products wholesale or direct through a farmers markets or pick-your-own operations. The most frequent responses were:

- to receive better prices and higher income (28%)
- a convenient way to sell and/or was best suited for their operation (13%)
- a good location for a roadside market (11%)
- liked meeting people and dealing directly with customers (11%)

Operators' Plans for Expansion

In order to get an idea of what the operators were planning for their markets in the near future, they were asked if they expected their roadside market operations to expand over the next few years, and (if so) how this growth would take place. Of those operators who expected their markets to expand, more than 82 percent anticipated increased sales of existing products (Table 38). Another 47.7 and 37.4 percent, respectively, expected to new add farm products and non-farm products. Only five markets (4.7%) expected to expand by increasing the length of the business day.

Approximately 40 percent of the respondents indicated that they did not expect their markets to expand. When asked for the factors that limited their operation to its present size, the msot frequent responses included:

- not interested in expanding; want to keep it so the family can handle it (29%)
- location or the physical properties of the location are not suitable (26%)
- age of the operator (19%)
- low prices and too much competition (15%)
- too much work involved (7%)
- a problem finding good help. (4%)

Future of Pennsylvania Roadside Markets - Operator's Feelings.

Generally, the operators who participated in this study appear to be rather optimistic about the future of their markets. About 43 percent of the respondents indicated that they felt 'very good' about their market's future. Another 35 percent felt 'good' while less than 15 percent felt 'fair'. Only three percent of the operators indicated that they would describe their feelings about the future of their market as 'bad'.

Operator's Comments

The operators were asked to discuss any problems they may have encountered or general feelings about roadside market operations. Although only 41 percent of the operators responded to this question, various problems and feelings concerning their operations were discussed. The problem most frequently reported was competition and low prices. Thirty-one of the comments reported related to the belief that competition was exerting downward pressure on prices, thereby jeopardizing the potential for a ´reasonable´ return. About a third of the comments concerning low prices were related to competitors who purchase truckloads of produce and set up ´down the road´, weekend and gardeners, card-table and wheelbarrow produce stands.

Eight operators felt that their customers generally were uneducated with respect to shopping at roadside markets. More specifically, some operators reported that their customers always expected high-quality products at low prices, but did not understand the growing conditions farmers face. A third problem, reported by six operators, concerned the amount of work involved in the operation of a roadside market. They pointed out that operating a roadside market is highly demanding and requires a good deal of hard physical work, and is particularly stressful during the peak season. Other problems reported dealt primarily with the procurement of competent labor. Complying with local government regulations regarding sign and billboard use, poor location, and low density of surrounding populations were also mentioned.

Other operators reported some of their general feelings about roadside marketing. Seven marketers reported that they liked the work and enjoyed meeting people. Others commented on "what it takes" to manage a successful roadside market. One operator reported that his formula for success at the roadside market was "QUALITY home-grown products, FRIENDLY, courteous help, ATTRACTIVE, bounteous displays, and ADVERTISING at key times with key groups." Another market operator emphasized "You must know your customer and supply his needs." This approach is stressed in many textbooks on marketing. Many growers assume that finding a market is the last step in starting an operation, when, in fact, it should be the first step in successful production and marketing planning (Yepsen, 1978). And finally, a third operator stressed, in retrospect, the view that roadside market managers should seek business and financial planning early in their careers as follows:

"I think that all small business people who anticipate growth should expose themselves to business and financial planning early in their careers. The road to success would be much easier. Most of us got there and then had to learn these principles afterwards."

Differences Among Crop Reporting Districts

In the analyses reported thus far, differences among Crop Reporting District's were not explored. One might expect, for example, differences in operating characteristics of roadside markets, products sold, total sales, labor practices, pricing, advertising and promotion, income sources, and operator's views on roadside markets. However, few significant differences were discovered among the nine Crop Reporting Districts for a wide range of key variables. (Table 39 provides the results of chi-square analyses used to test these differences).

Significant differences among Crop Reporting Districts were found for six variables (Table 40). Specifically, operator's assessment of how their prices compare with local retail stores differ significantly among Crop Reporting Districts. At least half of the respondents in the Northcentral, Central, and Southcentral Crop Reporting Districts report that their prices were lower than local retail prices. At least half of the respondents in the

Southeastern and Western districts report that their prices are about the same as local retail prices. Crop Reporting Districts also differ in terms of their use of local newspapers and customer relations/word of mouth for advertising and the frequency with which flowers are sold. However, meaningful patterns in these differences are not apparent. Operators in the Southeastern, Southwestern, and Northcentral districts are most likely to emphasize "Pennsylvania-grown" in their advertisements. Finally, operators in the Northern districts are less likely than those in Southern districts to receive income from wholesale farm sales in addition to their 1983 roadside market sales. In other words, roadside sales represent a higher percent of total family income for the northern operators.

SUMMARY AND CONCLUSIONS

Pennsylvania fruit and vegetable farmers have found direct marketing to be an excellent way to supplement incomes. Like any opportunity, it does not come without hard work and planning.

Planning should begin with a determination of: (1) what types of commodities do consumers in your region prefer; (2) when do these commodities sell best; (3) the number of consumers in your proposed market area; (4) the number of competitors in your proposed market area; and (5) the source of your products. Most direct marketing outlets are located on or near the farm that provides the bulk of the products sold. Success in the market place usually requires doing business approximately six days a wekk with emphasis on weekend hours. To service the roughly 400 customers per week that frequent an average market will require between 120 and 240 hours of labor. All this must be done in an economic environment that is increasingly competitive. Almost one third of Pennsylvania's roadside markets have annual gross sales of less than $20,000.

Despite these challenges, operators remain fairly optimistic about the future of their businesses and expect to see larger volumes of products sold. The future will belong to those who are best prepared for it. Farmers must not only be proficient in production practices, but must also be good business managers if their operations are to be successful.

Table 1. Roadside market survey questionnaires mailed and returned, by Pennsylvania crop-reporting district.

District	Mailed	Questionnaires	Returned
	(number)	(number)	%
Northwestern	27	15	55.6
North Central	47	21	44.7
Northeastern	18	7	38.9
West Central	34	26	76.5
Central	51	30	58.8
East Central	42	16	38.1
Southwestern	22	12	54.5
South Central	44	22	50.0
Southeastern	68	33	48.5
Total	353	182	51.6

Source: 1984 Pennsylvania survey data

Table 2. Sales area and parking spaces, by sales group, of Pennsylvania roadside markets.

Sales group	Sales area	Parking area[1]
($/year)	(ft.^{2})	(vehicle spaces)
$250,000 or more	4,008	38
$100,000 - $249,999	3,195	30
$50,000 - $99,999	1,425	24
$30,000 - $49,999	995	24
$15,000 - $29,999	1,130	24
$5,000 - $14,999	351	16
$5,000 or less	130	11
All markets	1,508[2]	23[3]

[1]The average for each sales group does not include those markets which reported more than 100 parking spaces. Markets with customer parking of this size are atypical.

[2]162 responses

[3]151 responses

Source: 1984 Pennsylvania survey data

Table 3. Roadside markets established during selected time-periods, by sales group.

Sales group (¢/year)	Year established						Total reporting
	Before 1930	1930-49	1950-59	1960-69	1970-79	1980-84	
$250,000 or more	1	2	3	2	7	1	16
$100,000 - $249,999	0	3	10	3	4	4	24
$50,000 - $99,999	0	3	4	8	6	5	26
$30,000 - $49,999	2	6	1	6	6	1	22
$15,000 - $29,999	1	0	4	3	6	1	15
$5,000 - $14,999	2	2	2	6	12	4	28
$5,000 or less	1	0	5	1	6	2	15
Not reporting sales	2	5	5	3	4	8	27
All markets reporting	9	21	34	32	51	26	173

Source: 1984 Pennsylvania survey data

Table 4. Years of experience of Pennsylvania roadside market operators in selling produce directly to consumers.

Experience[1]	Operators	
(years)	(number)	(%)
1-4	16	9.1
5-9	18	10.2
10-19	44	25.0
20-29	39	22.2
30-39	30	17.1
40-49	9	5.1
50 or longer	20	11.3
Total operators	176	100.0

[1]Including 1984

Source: 1984 Pennsylvania survey data

Table 5. Seasonality of Pennsylvania Roadside Markets, by Sales Group.

Sales group	Length of season: 12 months	6 months or less
($/year)	(%)	(%)
$250,000 or more	68.8	6.3
$100,000 - $249,999	64.0	8.0
$50,000 - $99,999	32.1	42.9
$30,000 - $49,999	8.3	45.8
$15,000 - $29,999	6.3	75.0
$5,000 - $14,999	0.0	72.4
$5,000 or less	6.6	93.3

Source: 1984 Pennsylvania survey data

Table 6. Business months of Pennsylvania roadside markets.

Month	Markets	
	(number)	(%)
January	67	36.8
February	66	36.3
March	68	37.4
April	80	44.0
May	92	50.5
June	122	67.0
July	158	86.8
August	173	95.1
September	179	98.4
October	165	90.7
November	121	66.5
December	95	52.5

Source: 1984 Pennsylvania survey data

Table 7. Business days of Pennsylvania roadside markets, by season.

	Season		
Days Open	Spring	Summer	Fall
	(%)	(%) percent	(%)
1	0.5	1.1	0.5
2	0.0	0.0	0.0
3	3.9	7.2	7.2
4	0.0	0.5	1.1
5	0.5	0.5	0.0
6	19.2	26.4	28.6
7	27.5	55.0	53.8
Not open	44.5	6.6	6.6
Not reporting	3.9	3.3	2.2
Total[1]	100.0	100.0	100.0

[1]Total based on 182 respondents.

Source: 1984 Pennsylvania survey data

Table 8. Percentage of 1983 gross market sales, by sales group and by type of product sold, at Pennsylvania roadside markets.

Annual Sales Group	Fruit	Vegetables	Other
	(%)	(%) percent	(%)
$250,000 or more	40.4	28.1	31.5
$100,000 - $249,999	49.2	32.8	18.0
$50,000 - $99,999	56.1	25.5	18.4
$30,000 - $49,999	54.2	34.3	11.5
$15,000 - $29,999	50.4	41.6	8.0
$5,000 - $14,999	35.2	60.4	4.4
$5,000 or less	31.7	50.3	18.0
All markets reporting[1]	47.5	38.8	13.7

[1]N=177

Source: 1984 Pennsylvania survey data

Table 9. Product rankings, by retail dollar value of sales, of retail sales, by sales group, Pennsylvania roadside markets.

	Annual Sales Group							
Rank	Under $5,000 or less	$5,000 - 14,999	$15,000- 29,999	$30,000- 49,999	$50,000- 99,999	$100,000- 249,999	$250,000 or more	All sales group
1	Corn	Corn	Corn	Corn	Apples	Corn	Corn	Corn
2	Tomatoes	Tomatoes	Peaches	Apples	Peaches	Apples	Apples	Apples
3	Apples	Beans	Tomatoes	Peaches	Corn	Peaches	Peaches	Tomatoes
4	Strawberries,	Potatoes	Apples	Tomatoes	Tomatoes	Tomatoes	Tomatoes	Peaches
5	Pumpkins	Peppers	Potatoes	Potatoes	Strawberries	Strawberries	Strawberries	Potatoes
6	Cider	Apples	Beans	Cantaloupes	Potatoes	Flowers/Plants	Baked Goods	Strawberries
7	Cucumbers	Cantaloupes	Cantaloupes	Beans	Cider	Potatoes	Cantaloupes	Beans
8	Raspberries	Cauliflower	Peppers	Berries	Pears	Eggs	Flowers/Plants	Cantaloupes
9	Beans	Strawberries	Pumpkins	Cider	Pumpkins	Pears	Cherries	Cider
10	Squash	Pumpkins	Honey	Strawberries	Plums	Cider	Cider	Peppers

Source: 1984 Pennsylvania survey data

Table 10. Product rankings by dollar value of 1983 retail sales, by Pennsylvania crop reporting district, 1983.

Rank	Northwestern	North Central	Northeastern	West Central	Central	East Central	Southwestern	South Central	Southeastern	All Districts
1	Corn	Corn	Corn	Apples	Corn	Corn	Corn	Apples	Corn	Corn
2	Tomatoes	Tomatoes	Tomatoes	Corn	Apples	Peaches	Apples	Peaches	Tomatoes	Apples
3	Peaches	Apples	Potatoes	Tomatoes	Tomatoes	Apples	Peaches	Corn	Peaches	Tomatoes
4	Melons	Potatoes	Peaches	Peaches	Peaches	Tomatoes	Tomatoes	Pears	Apples	Peaches
5	Apples	Peaches	Apples	Cider	Potatoes	Potatoes	Potatoes	Tomatoes	Strawberries	Potatoes
6	Pumpkins	Peppers	Beans	Strawberries	Strawberries	Pears	Beans	Strawberries	Flowers/plants	Strawberries
7	Raspberries	Strawberries	Peppers	Pumpkins	Cantaloupes	Plums	Flowers/Plants	Plums	Cantaloupes	Beans
8	Cantaloupes	Beans	Cider	Potatoes	Flowers/Plant	Cider	Baked Goods	Cantaloupes	Baked Goods	Cantaloupes
9	Strawberries	Cucumbers	Cantaloupes	Melons	Beans	Strawberries	Cider	Potatoes	Pumpkins	Cider
10	Broccoli	Squash	Cucumbers	Peppers	Eggs	Eggs	Dairy Products	Cherries	Cider	Peppers

Source: 1984 Pennsylvania survey data.

Table 11. Sources of fruits sold by roadside markets, by sales group, Pennsylvania 1983.

Annual Sales Group	Grow All*		Source		
			Grown	Purchased	
	Number	Percent	Some	Locally	Wholesale
			(%)	(%)	(%)
$250,000 or more	2	13.3	46.0	13.9	40.1
$100,000 - $249,999	3	13.6	48.6	25.9	25.5
$50,000 - $99,999	6	25.0	57.9	19.6	22.5
$30,000 - $49,999	7	30.4	63.4	23.3	13.3
$15,000 - $29,999	4	36.4	72.1	9.3	18.6
$5,000 - $14,999	9	42.9	59.8	27.6	12.6
$5,000 or less	8	72.7	85.5	0.9	13.6
All markets reporting[1]	44	30.8	60.5	18.2	21.3

*(X^2 = 33.56, df = 18, $p < .014$)

[1]Includes markets which reported fruit sources but did not report sales, but does not include those markets that sold no fruits; N=142.

Source: 1984 Pennsylvania survey data

Table 12. Sources of vegetables sold by roadside markets by sales group, Pennsylvania, 1983.

Annual sales group	Grow All*		Average Percentage by Source		
	Number	Percent	Grown	Bought Locally	Bought Wholesale
$250,000 or more	1	6.7	43.2	24.7	32.1
$100,000 - $249,999	4	19.0	57.2	20.8	22.0
$50,000 - $99,999	2	10.0	54.3	26.1	19.6
$30,000 - $49,999	4	20.0	80.7	10.5	8.8
$15,000 - $29,999	4	36.4	82.6	5.5	11.9
$5,000 - $14,999	12	57.1	95.2	3.6	1.2
$5,000 or less	6	54.5	97.4	1.5	1.1
All markets reporting[1]	38	28.8	71.9	13.7	14.4

* ($X^2 = 54.54$, df = 18, $p < .0001$)

[1] Includes markets which reported vegetable sources but did not report sales; does not include those markets that sold no vegetables, N=132.

Source: 1984 survey data

Table 13. Products other than fruits and vegetables sold at Pennsylvania roadside markets, 1983.

Product	Responses	
	(number)	(%)
Flowers and/or bedding plants	73	40.1
Dairy products	32	17.6
Honey, jams & jellies	26	14.3
Meat products	22	12.1
Baked goods	18	9.9
Souveniers & gifts	11	6.0
Eggs	9	5.0
Other	61	33.5

[1]Other items most commonly reported included groceries, candy, christmas trees, maple syrup, cider, herbs, and nursery stock.

Source: 1984 Pennsylvania survey data

Table 14. Methods of displaying produce at Pennsylvania roadside markets, by sales group.

Annual sales group	Display method Bulk	Package
	------------percent------------ (%)	
$250,000 or more	54.9	45.1
$100,000 - $249,999	37.3	62.7
$50,000 - $99,999	39.6	60.4
$30,000 - $49,999	38.2	61.8
$15,000 - $29,999	44.7	55.3
$5,000 - $14,999	46.4	53.6
$5,000 or less	45.0	55.0
All markets reporting	42.6	57.4

[1]Packages include lots packed in wooden baskets, plastic containers, and plastic or paper bags before display in the sales area.

Source: 1984 Pennsylvania survey data

Table 15. Annual gross sales of Pennsylvania roadside markets, by annual sales group.

Sales Group	Number[1]	Markets Percent	Cumulative Percent
	(no)	(%)	
$5,000 or less	15	9.8	9.8
$5,000 - $9,999	19	12.4	22.2
$10,000 - $14,999	10	6.5	28.7
$15,000 - $19,999	6	3.9	32.6
$20,000 - $29,999	10	6.5	39.1
$30,000 - $39,999	12	7.9	47.0
$40,000 - $49,999	12	7.9	54.9
$50,000 - $74,999	16	10.5	65.4
$75,000 - $99,999	12	7.9	73.3
$100,000 - $249,999	25	16.3	89.6
$250,000 - $499,999	7	4.6	94.2
$500,000 - $999,999	5	3.3	97.5
Over $1 million or more	4	2.6	100.0[2]

[1]N=153

[2]May not equal 100.0 due to roundoff error.

Source: 1984 Pennsylvania survey data.

Table 16. Change in annual gross sales by Pennsylvania roadside markets, 1975 through 1983.

Year	Average gross sales	Median sales group
1975	$ 66,269	$20,000-$29,999
1980	$105,934	$40,000-$49,999
1983	$139,962	$40,000-$49,999

Average Percent Increase in Gross Sales

Years	Nominal Increase		Inflation-adjusted[1]	
	Simple (%)	Compound (%)	Simple	Compound
1975-1980	11.97	9.84	4.04	3.75
1980-1983	10.71	9.73	7.34	6.86
1975-1983	13.90	9.80	5.83	4.90

[1] Adjustment for inflation is made by deflating the actual average sales level by the simple average of the index of fruit prices received by farmers and the index of vegetable prices received by farmers (USDA).

N=106

Source: 1984 Pennsylvania survey data

Table 17. Average labor, hours per week, required for Pennsylvania roadside market operations during the peak season, by sales group.

Annual sales group	markets reporting	Average lab hours required per week
	(number)	(hours/week)
$1 million or more	4	1201
$500,000 - $999,999	5	379
$250,000 - $499,999	7	271
$100,000 - $249,999	23	248
$75,000 - $99,999	12	181
$50,000 - $74,999	14	173
$40,000 - $49,999	12	159
$30,000 - $39,999	10	138
$20,000 - $29,999	10	122
$15,000 - $19,999	6	145
$10,000 - $14,999	10	110
$5,000 - $9,999	18	93
$5,000 or less	15	60
All markets reporting	167	183

Source: 1984 Pennsylvania survey data.

Table 18. Family members, including roadside market operators, employed during the peak season, by sales group.

Annual sales group	Family Members 1	2	3	4	More	NA[1]	Total[2]
	percent of respondents[3]						
	Full-time *						
$250,000 or more	31.3	12.5	12.5	12.5	12.5	18.8	100.0
$100,000 - $249,999	12.0	48.0	20.0	0.0	8.0	12.0	100.0
$50,000 - $99,999	25.0	39.3	10.7	3.6	0.0	21.4	100.0
$30,000 - $49,999	25.0	29.2	25.0	0.0	8.3	12.5	100.0
$15,000 - $29,999	37.5	50.0	6.3	6.3	0.0	0.0	100.0
$5,000 - $14,999	31.0	31.0	10.3	13.8	3.5	10.3	100.0
$5,000 or less	20.0	46.7	0.0	13.3	6.7	13.3	100.0
All reporting markets	22.5	37.6	12.4	7.3	5.0	15.2	100.0
	Part-time **						
$250,000 or more	18.8	18.8	12.5	6.3	12.5	31.3	100.0
$100,000 - $249,999	20.0	20.0	8.0	0.0	0.0	52.0	100.0
$50,000 - $99,999	35.7	14.3	3.6	3.6	3.6	39.3	100.0
$30,000 - $49,999	25.0	8.3	0.0	0.0	0.0	66.7	100.0
$15,000 - $29,999	31.3	25.0	0.0	12.5	6.3	25.0	100.0
$5,000 - $14,999	24.1	34.5	3.5	0.0	3.5	34.5	100.0
$5,000 or less	33.3	13.3	0.0	6.7	0.0	46.7	100.0
All reporting markets	26.4	19.1	6.2	3.4	2.8	42.1	100.0

[1]No answer means no family members were reported.
[2]May not equal 100.0 due to roundoff error.
[3]Percentage based on 178 respondents.
Source: 1984 Pennsylvania survey data.
* ($X^2 = 7.41$, df = 6, $p < .285$)
** ($X^2 = 11.71$, df = 6, $p < .059$)

Table 19. Hired workers employed at roadside markets, during the peak season, by sales group.

Annual sales group	Hired employees 1	2	3	4-10	More	NA[1]	Total[2]
	-------------percent of respondents[3]						
			Full-time *				
$250,000 or more	12.5	6.3	18.8	18.8	18.8	25.0	100.0
$100,000 - $249,999	20.0	48.0	4.0	12.0	0.0	16.0	100.0
$50,000 - $99,999	21.4	10.7	7.1	10.7	0.0	50.0	100.0
$30,000 - $49,999	8.3	16.7	12.5	0.0	0.0	62.5	100.0
$15,000 - $29,999	25.0	12.5	0.0	0.0	0.0	62.5	100.0
$5,000 - $14,999	6.9	6.9	0.0	0.0	0.0	86.2	100.0
$5,000 or less	0.0	6.7	0.0	0.0	0.0	93.3	100.0
All reporting markets	12.9	14.6	6.2	6.2	1.7	58.4	100.0
			Part-time **				
$250,000 or more	0.0	0.0	6.3	43.8	31.3	18.8	100.0
$100,000 - $249,999	16.0	20.0	8.0	36.0	0.0	20.0	100.0
$50,000 - $99,999	22.2	18.5	3.7	14.8	0.0	40.7	100.0
$30,000 - $49,999	20.8	16.7	12.5	16.7	0.0	33.3	100.0
$15,000 - $29,999	31.3	12.5	0.0	0.0	0.0	56.3	100.0
$5,000 - $14,999	10.3	6.9	13.8	10.3	0.0	58.6	100.0
$5,000 or less	13.3	0.0	0.0	0.0	0.0	86.7	100.0
All reporting markets	15.8	11.9	7.3	17.0	2.8	45.2	100.0

[1]No answer means no employees.

[2]May not equal 100.0 due to roundoff.

[3]Percentage based on 178 respondents.

Source: 1984 Pennsylvania survey data.

* (X^2 = 39.99, df = 12, $p < .0001$)

** (X^2 = 68.78, df = 12, $p < .0001$)

Table 20. How roadside market prices compare to those of local retail stores in Pennsylvania.

Price relative to local retail stores	Markets reporting	
	(number)	(%)
Higher	20	11.0
About the same	73	40.1
Lower	81	44.5
"Don't know," or "no response"	8	4.4
Total	182	100.0

Source: 1984 Pennsylvania survey data.

Table 21. Importance and average weighted score of various methods used by Pennsylvania roadside market operators in setting produce prices.

Price-determination methods	Extremely important (5)	Major importance (4)	Average importance (3)	Minor importance (2)	No importance (1)	No response (0)	Average weighted score
			Percent				
Make own price	21.9	28.4	25.1	7.1	6.6	10.9	3.58
Cost of production plus mark-up	25.1	30.1	18.0	11.5	8.7	6.6	3.55
Prices charged by competitors (Other than local supermarkets)	18.0	29.0	24.0	18.0	5.5	5.5	3.38
Last year's price adjusted upward	8.2	20.2	29.5	18.0	17.0	7.1	2.84
Prices charged at local supermarkets	4.9	9.8	32.8	32.3	15.3	4.9	2.55
Prices quoted from market news service	5.5	15.3	24.0	21.9	26.2	7.1	2.48
Other methods[1]	←		13.7		→	86.3	-

[1]Other responses reported by respondents included the supply and demand situation, product quality, wholesale-price comparisons, and price comparisons from beyond the local area.

Source: 1984 Pennsylvania survey data

Table 22. Frequency with which Pennsylvania roadside market operators compare their prices with competition.

Frequency of Comparisons	Market operators reporting	
	(number)	(%)
Regularly	73	40.1
Occasionally	97	53.3
Never	11	6.1
No response	1	0.5
Total	182	100.0

Source: 1984 Pennsylvania survey data.

Table 23. Sources of price-comparison information used by Pennsylvania roadside market operations.

Where prices are checked	Operators responding	
	(number)	(%)
Other roadside markets	125	68.7
Grocery store or supermarket	115	63.2
Market reports	112	61.5
Farmer's markets	82	45.1
Other methods[1]	11	6.0

[1]Other methods included: newspaper, wholesale price comparisons, and the Pennsylvania Produce Hotline.

N=182; Total percentage exceeds 100 because respondents frequently checked prices at more than one place.

Source: 1984 Pennsylvania survey data.

Table 24. Advertising expenditures by Pennsylvania roadside market operators, by sales group, 1983.

	Dollar amount[1]			Percent of sales[1]		
1983 market sales	Mean	Minimum	Maximum	Mean	Minimum	Maximum
	------------Dollars------------			------------Percent------------		
More than $1 million[2]	33,000	10,000	62,000	2.64	0.80	4.96
$500,000 - $999,999	10,500	3,000	29,000	1.40	0.40	3.87
$250,000 - $499,999	5,171	400	15,000	1.38	0.11	4.00
$100,000 - $249,999	4,234	0	32,000	2.42	0.00	18.29
$75,000 - $99,999	1,127	200	2,000	1.29	0.23	2.29
$50,000 - $74,999	1,230	100	3,500	1.97	0.16	5.60
$40,000 - $49,999	1,258	75	4,000	2.80	0.17	8.89
$30,000 - $39,999	520	0	1,200	1.48	0.00	3.43
$20,000 - $29,999	835	100	2,500	3.34	0.04	10.00
$15,000 - $19,999	500	300	600	2.86	1.71	3.43
$10,000 - $14,999	126	0	600	1.01	0.00	4.80
$5,000 - $9,999	261	10	1,000	3.48	0.13	13.33
Under $5,000[3]	132	0	600	3.30	0.00	15.00
All markets reporting	2,849	0	62,000	2.08	-	-

[1]The midpoint of each interval was used to calculate the dollar amount and percent of sales spent on advertising.

[2]The value of $1,250,000 was used to represent the sale category of 'more than $1 million'.

[3]The value of $4,000 was used to represent the sale category of 'less than $5,000'.

Source: 1984 Pennsylvania survey data.

Table 25. Purchased advertising used by Pennsylvania roadside market operators, 1983.

Media and frequency of advertising	Sales group: $5,000 or less	$5,000-14,999	$15,000-$29,999	$30,000-49,999	$50,000-99,999	$100,000-249,999	250,000 or more	Total
	Number indicating use							
Daily								
Mailed circulars or flyers	--	--	1	--	--	--	--	1
Local newspaper	3	2	4	3	3	7	--	22
Radio	--	--	--	--	--	--	1	1
Television	--	--	--	--	--	1	--	1
Container or package labels	3	5	4	8	16	15	12	63
Novelty items	1	--	--	2	--	1	3	7
Weekly								
Mailed circulars or flyers	--	--	1	--	1	--	--	2
Local newspapers	3	6	6	6	11	11	13	56
Radio	--	--	--	4	2	1	2	9
Television	--	--	--	--	--	--	--	--
Occassionally								
Mailed circulars or flyers	1	4	2	4	3	3	3	20
Local newspaper	2	15	6	9	12	5	2	51
Radio	--	3	5	7	11	13	9	48
Television	--	--	2	1	--	3	1	7
Billboards	--	2	5	4	2	3	4	20
Roadsigns	8	23	11	19	17	16	12	105
Signs attached to market structure	8	21	11	13	21	19	14	107
Container or package labels	--	2	2	3	1	2	2	12
Novelty items	1	4	3	--	5	6	5	24
Number of markets reporting	15	29	16	24	28	25	16	153

Source: 1984 Pennsylvania survey data.

Table 26. Information advertised by Pennsylvania roadside market through commercial operators advertisement messages.

Information	Operators responding Number	Percent
	(number)	(%)
Products available	146	80.2
Directions to market	114	62.6
Opening dates and hours	111	61.0
Farm freshness	105	57.7
Product prices	48	26.4
Date of product availability	46	25.3
Other[1]	16	8.8

[1]Other information included "product specials," "telephone number of the market," "service," "organically grown," and "food stamps accepted."

Source: 1984 Pennsylvania survey data.

Table 27. Population of nearest town or city, by sales group, of Pennsylvania roadside markets.

Population	Market operators responding	
	(number)	(%)
2,500 or fewer	22	13.4
2,500 - 4,999	20	12.2
5,000 - 9,999	31	18.9
10,000 - 24,999	33	20.1
25,000 - 49,999	18	11.0
50,000 - 99,999	17	10.4
100,000 or more	23	14.0
Total	164	100.0

Source: 1984 Pennsylvania survey data.

Table 28. Distance from nearest town or city, to Pennsylvania roadside markets.

Distance	Market operators responding	
	(number)	(%)
1 mile or less	47	28.7
2 miles	34	20.7
3 miles	28	17.1
4-5 miles	24	14.6
6-10 miles	20	12.2
more than 10 miles	11	6.7
Total	164	100.0

Source: 1984 Pennsylvania survey data.

Table 29. Percent of annual sales generated by nearest town or city, Pennsylvania roadside markets, 1984.

Sales	Market operators responding	
	(number)	(%)
10 percent or less	9	5.9
10 - 19	26	17.0
20 - 29	30	19.6
30 - 39	25	16.3
40 - 49	12	7.8
50 - 59	22	14.4
60 - 75	20	13.1
76 percent or more	9	5.9
Total	153[1]	100.0

[1]Of the 164 respondents reported the nearest town or city and the distance from their market to that town or city, 11 did not report an estimate for the percent of market sales generated.

Source: 1984 Pennsylvania survey data.

Table 30. Average number of customers served per week, by season and sales group, by Pennsylvania roadside markets.

Annual sales group	Spring *	Summer **	Fall ***
		number of customers	
$250,000 or more	513	586	572
$100,000 - $249,999	412	519	496
$50,000 - $99,999	384	474	421
$30,000 - $49,999	324	364	324
$15,000 - $29,999	116	332	282
$5,000 - $14,999	113	231	190
$5,000 or less	13	105	38
All markets	358	421	375

[1]To calculate averages, the midpoints of the response categories 1-25, 26-50, 57-100, 101-250, and 251-500 customers per week were used, while 600 was used to represent the 'over 500 customers per week' category.

Source: 1984 Pennsylvania survey data.

* (X^2 = 117.91, df = 42, p .0001)

** (X^2 = 98.00, df = 36, p .0001)

*** (X^2 = 133.39, df = 42, p .0001)

Table 31. Average purchase per customer, by sales group and season, for responding Pennsylvania roadside markets.

Annual sales group	Average purchase[1]		
	Spring*	Summer**	Fall***
$250,000 or more	8.50	8.70	9.30
$100,000 - $249,999	7.07	7.20	6.98
$50,000 - $99,999	6.04	6.70	6.96
$30,000 - $49,999	6.32	5.66	6.29
$15,000 - $29,999	6.33	5.29	5.67
$5,000 - $14,999	6.66	5.50	5.33
$5,000 or less	NA	NA	NA
All Markets	6.68	6.27	6.70

[1]To calculate the averages, the midpoints of the response categories under $2.00, $2.00-$3.99, $4.00-$5.99, $6.00-$7.99, $8.00-$9.99, $10.00-$11.99, and $12.00-$15.00 were used, while $16.00 was used to represent the "over $15.00" category.

Source: 1984 Pennsylvania survey data

* (X^2 = 76.12, df = 48, $p < .006$)
** (X^2 = 66.72, df, = 54, $p < .115$)
*** (X^2 = 72.70, df = 48, $p < .012$)

Table 32. Competition (estimated number of competing markets) located within one mile.

Competitors	Market operators responding	
(number)[1]	(number)	(%)
0	65	35.71
1	38	20.88
2	36	19.78
3-4	23	12.64
5-10	13	7.14
No response	7	3.85
Total	182	100.0

Source: 1984 Pennsylvania survey data.

[1]As estimated by market operator.

Table 33. Estimated number of competitors located within a five-mile radius of roadside markets, Pennsylvania, 1984.

Competitors	Operators responding	
(number)[1]	(number)	(%)
0-2	43	23.63
3-4	34	18.68
5-6	40	21.98
7-10	35	19.23
Over 10	19	10.44
No Response	11	6.04
Total	182	100.0

Source: 1984 Pennsylvania survey data.

[1]As estimated by market operator.

Competition (estimated number of competing markets) located within 5 miles.

Table 34. Competition (estimated number of competing markets) located 10 miles.

Competitors	Operators' responses	
(number)[1]	(number)	(%)
0-5	44	24.18
6-10	49	26.92
11-20	42	23.08
21-30	11	6.04
30 or more	19	10.44
No response	17	9.34
Total	182	100.0

Source: 1984 Pennsylvania survey data.

[1]As estimated by market operator.

Table 35. Proportion of total operator's family income generated by roadside maintenance sales, 1975, 1980, and 1983.

Income	1975	1980	1983
(%)		Operators (%)	
1-25	45.8	44.1	38.2
26-50	19.6	20.6	19.7
51-75	16.8	16.9	21.7
76-100	17.8	18.4	20.4
Weighted average[1]	39.6	40.4	44.1
N[2]	107	136	152

[1]The weighted average was calculated as:

$$AVE = \sum_{i=1}^{i} X_i \; Y_i$$

where: $\overline{X}$ = the midpoint of income category i

Y = the percentage of operators who reported income category i

i = the income category

[2]N is less than 182 because the number of nonrespondents for the years reported ranged from 24 in 1983 to 30 in 1975, while the number of markets which were not in operation during a given year ranged from 6 in 1983 to 45 in 1975.

Source: 1984 Pennsylvania survey data

Table 36. Proportion of operator's total family income generated by roadside market sales, by sales group, 1983. *

Annual Sales Group	Percent of income: 1-25	26-50	51-75	76-100	Weighted Average
	Market operators (%)				
$250,000 or more	0	35.7	14.3	50.0	67
$100,000 - $249,999	20.0	4.0	32.0	44.0	63
$50,000 - $99,999	41.7	20.8	33.3	4.2	38
$30,000 - $49,999	13.1	30.4	26.1	30.4	56
$15,000 - $29,999	50.0	25.0	25.0	0.0	32
$5,000 - $14,999	55.2	24.2	10.3	10.3	32
$5,000 or less	92.9	7.1	0	0	15

Source: 1984 Pennsylvania survey data.

* (X^2 = 71.88, df = 24, $p < .0001$)

Table 37. Sources of additional farm and nonfarm income reported by roadside market operators.

Source of income	Responses	
	(number)	(%)
Farm:	102	56.0
Wholesaling produce	57	33.1
Pick-your-own	39	22.7
Farmer's market	21	12.2
Other farm	49	28.5
Nonfarm:	79	43.4
Operator off-farm income	44	25.6
Spouse off-farm income	39	22.7
Other	14	8.1

Multiple Responses Possible

Source: 1984 Pennsylvania survey data

Table 38. Methods by which operators expect their markets to grow.

Method	Responses	
	(number)	(%)
Larger quantities of present products	88	82.2
New farm products	51	47.7
New non-farm products	40	37.4
Longer season	26	24.3
Longer hours	5	4.7
Other[1]	14	7.7

[1]Other methods reported by respondents included "quality products," "expansion of the market building," "more customers," "eliminating the competition," "moving to a better location," "food service," and "using better farming methods and equipment."

Source: 1984 Pennsylvania survey data

Table 39. Chi-square differences for selected variables from a survey of Pennsylvania roadside markets, 1983.

Question	Chi-square	Degrees of Freedom	Significance Level
Does RSM operate also operate a farm?	8.09	8	.43
Is RSM located on farm?	11.58	16	.77
Does RSM operator own market facilities?	7.51	8	.48
Type of market facility	21.55	16	.16
Side of road market is located on	20.29	24	.68
Mailed circulars or flyers -- frequency of use in advertising	41.31	32	.13
Radio - frequency of use in advertising	33.25	32	.41
TV - frequency of use in advertising	25.13	32	.80
Billboards - frequency of use in advertising	29.62	32	.59
Roadsigns - frequency of use in advertising	42.30	32	.11
Signs attached to market structure frequency of use in advertising	39.02	32	.18
Container or package labels - frequency of use in advertising	38.05	32	.21
Novelty items - frequency of use in advertising	22.73	24	.54
Did you use "Pa-Agriculture - We're Growing Better?"	37.74	40	.57
Was Pa. logo effective in increasing sales?	38.41	32	.20

Table 39. (Continued)

Question	Chi-square	Degrees of Freedom	Significance Level
Average number of customers/week in Spring	56.83	56	.44
Average number of customers/week in Summer	53.79	48	.26
Average number of customers/week in Fall	70.95	56	.09
Average dollar amount purchased/ customer in Spring	75.38	64	.16
Average dollar amount purchased/ customer in Summer	78.96	72	.28
Average dollar amount purchased/ customer in Fall	64.71	64	.45
Other products - meats	5.06	8	.75
Other products - dairy	8.84	8	.36
Retail sales - 1975	116.36	96	.08
Retail sales - 1980	122.30	104	.11
Retail sales - 1983	115.93	104	.20
Percentage of total family income generated by RSM sales - 1975	38.09	40	.56
Percentage of total family income generated by RSM sales - 1980	43.27	40	.33
Percentage of total family income generated by RSM sales - 1983	51.03	40	.11
Other sources of income, 1983 - direct sales at farmer's markets	8.74	8	.36
Other sources of income, 1983 - direct sales from pick your own	1.63	8	.99
Other sources of income, 1983 - wholesale farm sales	7.27	8	.51
Other sources of income, 1983 - other farm income	3.83	8	.87

Table 39. (Continued)

Question	Chi-square	Degrees of Freedom	Significance Level
Other sources of income, 1983 - market operator earned off-farm income	9.54	8	.30
Other sources of income, 1983 - market operator's spouse earned off-farm income	7.15	8	.52
How do you feel about future of roadside market?	25.33	24	.39
How often do you compare prices with competitors?	17.64	16	.35
Advertisements include: directions to market	8.70	8	.37
Advertisements include: opening dates and hours	9.77	8	.28
Advertisements include: product availability	11.37	8	.18
Advertisements include: dates of product availability	3.33	8	.91
Advertisements include: farm freshness	11.53	8	.17
Advertisements include: product prices	13.72	8	.09

Table 40. Significant chi-square differences for selected variables from a survey of Pennsylvania roadside markets, 1983.

Question	Chi-square	Degrees of Freedom	Significance Level
How do your prices compare to local retail stores?	38.96	24	.03
Customer relations and word of mouth -- frequency of use in advertising	20.82	8	.008
Local newspaper -- frequency of use in advertising	48.33	32	.03
Was Pa.-grown emphasized in your ads?	54.33	32	.008
Other products sold--flowers	20.65	8	.008
Percentage of total family income in 1983 generated by roadside market sales	16.27	8	.04

Figure 1. Number of Pennsylvania Roadside Markets By County

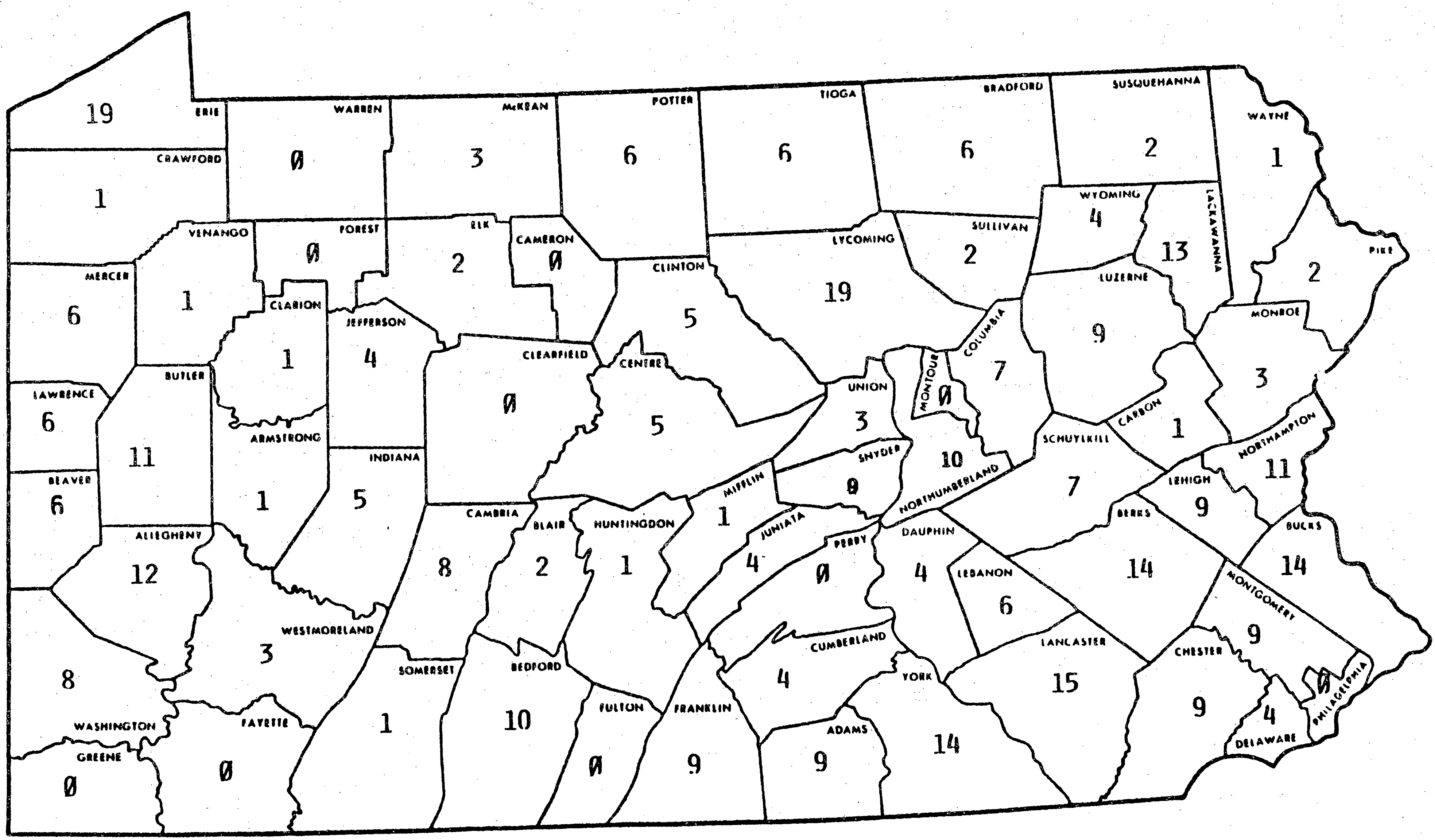
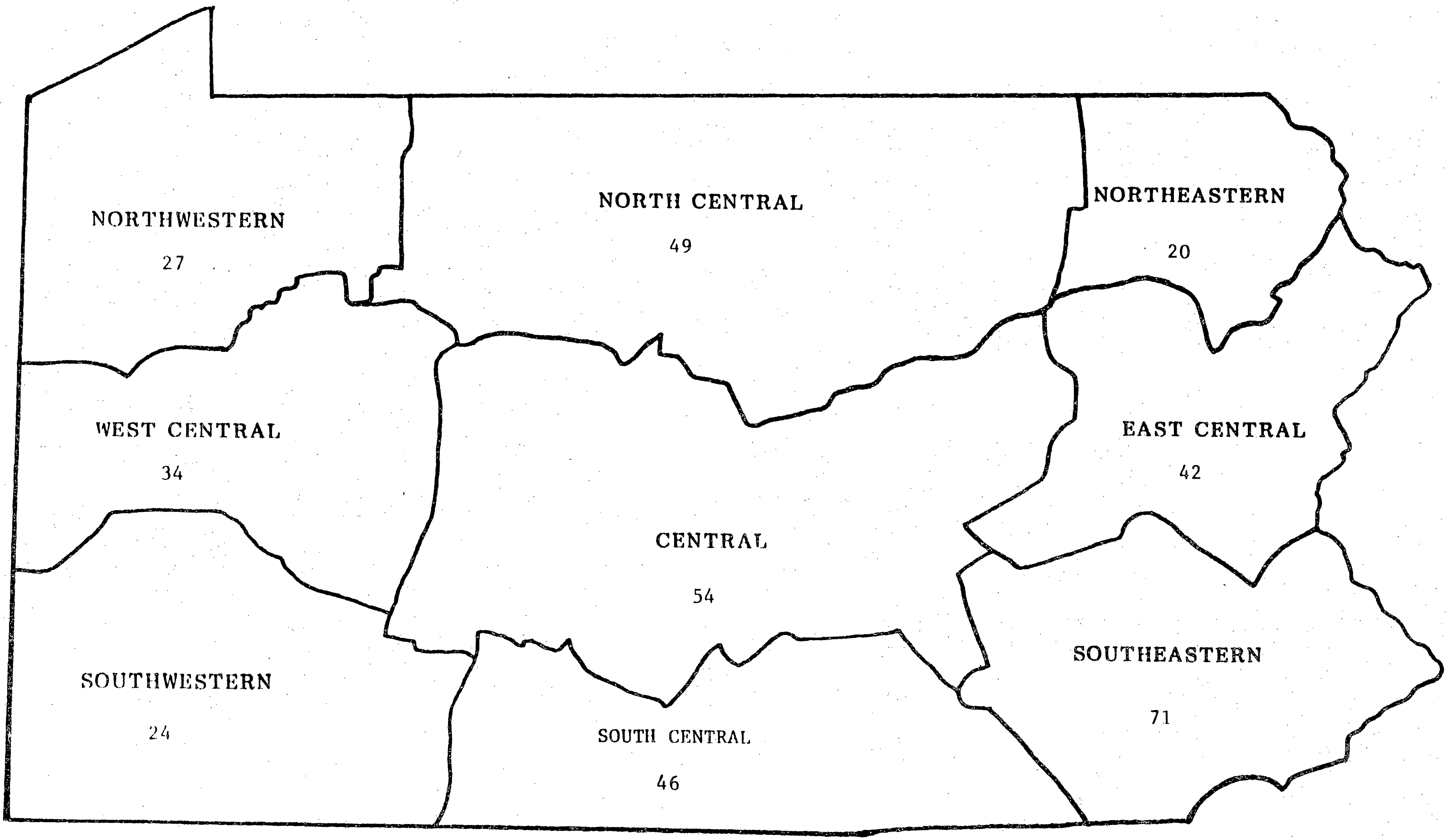


Figure 2. Number of Pennsylvania Roadside Markets By Crop Reporting District, 1984.



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APPENDIX A: QUESTIONNAIRE

A Survey of Pennsylvania Roadside Markets

The Pennsylvania State University, College of Agriculture,
Department of Agricultural Economics and Rural Sociology

Please answer the following questions about your roadside market operations to the best of your ability. You, and something to write with, are all that are needed to complete this questionnaire.

1. When was the roadside market established at this location? Year _____

2. How long have you been selling produce directly to consumers (including 1984)? No. of Years _____

3. Does the roadside market operator or a member of his (her) immediate family operate a farm? Yes ( ) No ( )

   Is the roadside market facility located on the farm? Yes ( ) No ( )

   If "No", how many miles from farm to market? No. of Miles _____

4. Does the market operator own the market facilities? Yes ( ) No ( )

5. a. What type of market facility is used (please check)

      ( ) permanent building
      ( ) temporary facility
      ( ) Other (specify) ___________________________.

   b. Estimate the roadside market:

      1. sales area in square feet? _____ Sq. ft.

      2. storage area in cubic feet:
         a. at the roadside market? _____ Cu. ft.
         b. at the farm or elsewhere? _____ Cu. ft.

      3. refrigerated storage in cubic feet:
         a. at the roadside market? _____ Cu. ft.
         b. at the farm or elsewhere? _____ Cu. ft.

6. a. What side of the road is your market on as you approach the nearest town or city? Right ( ) Left ( )

   b. How many cars can be parked at one time OFF of the main road or highway at your market? _____ No. of Cars

7. Give your best estimate of the number of competitors (roadside markets, pick-your-owns, farmer's markets, supermarkets, etc.):

   a. within a 1-mile radius of your market ____

   b. within a 5-mile radius of your market ____

   c. within a 10-mile radius of your market ____

8. List the names of the towns and cities from which the majority of your customers come, the distance from these towns or cities to your market, and estimate the percent of business generated by each:

Name of Town or City	Distance from Market in Miles	% of Business
____	____	____%
____	____	____%
____	____	____%
____	____	____%
Non-Local Business		____%
		100%

9. Please rate all of the following factors which assist you in determining the price you charge for your produce. If the item is of no importance place the number 1 alongside the comment while if the item is extremely important place the number 5 alongside the comment. Use the following scale as a reference.

1	2	3	4	5
No importance	Minor importance	Average importance	Major importance	Extremely important

____prices charged at local supermarkets
____prices charged by other competitors
____price quotes from Market News Service
____make own price
____cost of production plus markup
____last years price adjusted upward
____other (specify) ______________________.

10. How do most of your prices compare to those of local retail stores (chain and independent grocery stores)? (please check only one)

    ( ) higher than retail prices
    ( ) about the same as retail prices
    ( ) lower than retail prices
    ( ) don't know

11. Do you ( ) regularly compare prices with your competitors?
( ) occasionally
( ) never

Where do you check prices? (please check all which apply)
( ) Market Reports
( ) other roadside markets
( ) farmer's markets
( ) grocery store or supermarket
( ) other (specify) ______________________________.

12. How do you display your products?

a. bulk displays for customer selection _____%

b. prepackaged or in wooden baskets, plastic containers, or plastic or paper bags _____%

100%

13. What methods and frequency of advertising and promotion do you use? (please check if applicable)

a. Customer relations and word of mouth ( )

	Daily	Weekly	Occassionally
b. Mailed circulars or flyers	( )	( )	( )
c. Local Newspaper	( )	( )	( )
d. Radio	( )	( )	( )
e. T.V.	( )	( )	( )
f. Billboards	( )	( )	( )
g. Roadsigns	( )	( )	( )
h. Sign(s) attached to market structure	( )	( )	( )
i. Container or package labels	( )	( )	( )
j. Novelty items (i.e. pencils, calendars, matchbooks, menus, etc.)	( )	( )	( )
k. Other (specify) __________	( )	( )	( )

(If you checked only item a in question 13, please skip to question 15; otherwise, please continue on to question 14).

14. a. Estimate how much you spent on advertising in 1983? $______

b. What information do you try to convey through your ads? (please check all that are applicable)

( ) directions to your market
( ) opening dates and hours
( ) various products available
( ) dates when various products will be available
( ) farm freshness
( ) product prices
( ) other (specify) ______________________________.

c. Do you feel your advertising has been effective in increasing your sales?

( ) very effective
( ) somewhat effective
( ) not effective
( ) undecided

d. Was "Pennsylvania-grown" emphasized in your ads?

( ) always
( ) generally
( ) seldom
( ) never

e. If "Pennsylvania-grown" was emphasized in your ads, did you use the logo, "Pennsylvania Agriculture - We're Growing Better" for promotion?

( ) always
( ) generally
( ) seldom
( ) never

f. If you used the Pennsylvania logo for promotion, do you feel it was effective in increasing your sales?

( ) very effective
( ) somewhat effective
( ) not effective
( ) undecided

15. a. Please circle <u>all</u> the months your roadside market is normally open:

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

b. <u>Place an "X"</u> through the month above during which your roadside market sales are generally the highest.

c. Please place a check by the days of the week your market is normally open in each of the 3 seasons listed below. Then for the days you have checked, indicate your 3 busiest days in terms of total market sales by ranking them from 1 to 3, where 1 indicates your busiest day in each season.

Spring (Mar-Apr-May)	Rank	Summer (Jun-Jul-Aug)	Rank	Fall (Sep-Oct-Nov)	Rank
( ) Monday	____	( ) Monday	____	( ) Monday	____
( ) Tuesday	____	( ) Tuesday	____	( ) Tuesday	____
( ) Wednesday	____	( ) Wednesday	____	( ) Wednesday	____
( ) Thursday	____	( ) Thursday	____	( ) Thursday	____
( ) Friday	____	( ) Friday	____	( ) Friday	____
( ) Saturday	____	( ) Saturday	____	( ) Saturday	____
( ) Sunday	____	( ) Sunday	____	( ) Sunday	____

d. Please check the appropriate size group which best indicates:

1. The average number of customers that visit your market per week for each of the following seasons

Spring	Summer	Fall	
( )	( )	( )	Not in operation during season
( )	( )	( )	1 - 25 customers per week
( )	( )	( )	26 - 50 customers per week
( )	( )	( )	51 - 100 customers per week
( )	( )	( )	101 - 250 customers per week
( )	( )	( )	251 - 500 customers per week
( )	( )	( )	Over 500 customers per week

2. The average dollar amount purchased per customer for each of the following seasons

Spring	Summer	Fall	
( )	( )	( )	Not in operation during season
( )	( )	( )	0.00 - 1.99 dollars per customer
( )	( )	( )	2.00 - 3.99 dollars per customer
( )	( )	( )	4.00 - 5.99 dollars per customer
( )	( )	( )	6.00 - 7.99 dollars per customer
( )	( )	( )	8.00 - 9.99 dollars per customer
( )	( )	( )	10.00 - 11.99 dollars per customer
( )	( )	( )	12.00 - 15.00 dollars per customer
( )	( )	( )	Over 15.00 dollars per customer

16. Please list in order of importance (according to dollar value of retail sales) the principal products you sold in 1983. (Please be specific by reporting such things as snap beans, apples, eggs, honey, potted or cut flowers, blueberries, sweet corn, tomatoes, peaches, bakery products, potatoes, strawberries, etc.)

1. ______________ 6. ______________
2. ______________ 7. ______________
3. ______________ 8. ______________
4. ______________ 9. ______________
5. ______________ 10. ______________

17. Approximately what percentage of your 1983 gross roadside market sales were:

Fruits _____%
Vegetables _____%
Other _____%
100%

If you sold products other than fruits or vegetables, what were they?

( ) meats
( ) dairy
( ) flowers and/or bedding plants
( ) Other (specify) ______________________.

18. Approximately what percentage of your 1983 gross roadside market sales were obtained from the following sources:

		Fruits	Vegetables	Other
a.	Grown by you	____%	____%	____%
b.	Purchased for resale from local farmers	____%	____%	____%
c.	Purchased for resale from wholesalers	____%	____%	____%
		100%	100%	100%

19. Did you sell organic produce at the market in 1983? Yes( ) No( )

If "Yes", what percentage of your total roadside sales were organic? ____%

What percentage of your organic sales were:

a. Grown by you? ____%
b. Purchased for resale ____%
100%

20. Do you accept food stamps at your roadside market? Yes( ) No( )

If "Yes", estimate the percentage of your total sales which were purchased with food stamps in 1983? ________ %

For question 21 include ONLY the labor directly required for roadside market operations such as purchasing, selling, transportation, grading, sorting, display, packaging, etc. DO NOT include the time required for production.

21. Give your best estimate of:

a. The total number of hours of labor (including the market operator's time) required per week to operate the market during the peak season.

__________________Hours per week.

b. The number of people employed at your roadside market during your peak season

1. Number of family members (including operator)
Full-time ______
Part-time ______

2. Number of hired employees
Full-time ______
Part-time ______

22. Please check the appropriate size group which best indicates the gross volume of retail sales for your entire roadside market operation for 1975, 1980, and 1983:

1975	1980	1983		1975	1980	1983	
( )	( )	( )	Not open that year	( )	( )	( )	$40,000-$49,999
( )	( )	( )	Under $5,000	( )	( )	( )	$50,000-$74,999
( )	( )	( )	$5,000-$9,999	( )	( )	( )	$75,000-$99,999
( )	( )	( )	$10,000-$14,999	( )	( )	( )	$100,000-$249,999
( )	( )	( )	$15,000-$19,999	( )	( )	( )	$250,000-$499,999
( )	( )	( )	$20,000-$29,999	( )	( )	( )	$500,000-$999,999
( )	( )	( )	$30,000-$39,999	( )	( )	( )	Over $1 Million

23. Please check the appropriate size group which best indicates the approximate percentage of your total family income which was generated from your roadside market sales in 1975, 1980, and 1983:

1975	1980	1983	
( )	( )	( )	Not open that year
( )	( )	( )	0 - 25% of total family income
( )	( )	( )	26 - 50% of total family income
( )	( )	( )	51 - 75% of total family income
( )	( )	( )	76 - 100% of total family income

If roadside market sales in 1983 generated less than 100% of your total family income, what other sources of income did your family receive during that year? (please check all that are applicable)

( ) direct sales at farmer's markets
( ) direct sales from pick-your-own
( ) wholesale farm sales
( ) other farm income (specify) ______________________.
( ) market operator had off-farm income
( ) spouse of market operator had off-farm income
( ) other (specify) ______________________.

24. What was your reason for establishing a roadside market rather than selling products wholesale or through farmer's markets, curb markets, or pick-your-own?

____

____

____

25. a. How many years of schooling did you complete? ____years

b. Before operating this roadside market, what previous experience or training did you have marketing farm produce?

( ) grew up on a farm operated by parents or other relatives where produce was sold directly to consumers
( ) worked as a hired hand on a farm outlet which sold produce directly to consumers
( ) Other (specify) ______________________

c. What business training have you had?

( ) college business degree (2 or 4 year degree)
( ) college business courses
( ) high school business courses
( ) business experience with other firm or enterprise
( ) small business seminar
( ) PFA (Certified Market) sponsored workshop
( ) Extension management workshop
( ) Other (specify) ______________________________.
( ) None of the above

26. Is there any additional training which you would like to have? If "Yes", please check all categories which apply and circle the category which is most important to you.

( ) pricing
( ) advertising
( ) packaging and display
( ) laws and regulations
( ) tax preparation
( ) selecting and supervising employees
( ) employee training
( ) bookkeeping
( ) salesmanship
( ) financial management
( ) production
( ) Other (specify) ___________________________________.

27. Would you be interested in:

a. Being certified as a Pennsylvania Farm Market by the Pennsylvania Farmer's Association?

( ) Yes
( ) No
( ) Already Certified

b. Receiving information on the Farm Market Loan Program established by the Pennsylvania Department of Agriculture to help finance low-interest loans to PA family farmers involved in direct marketing of farm products?

( ) Yes
( ) No
( ) Have already received a loan from this program

28. Do you expect your roadside market operation to expand over the next few years? Yes ( ) No ( )

If "Yes", How do you expect this to come about?

( ) larger quantities of present products
( ) new farm products
( ) new non-farm products
( ) longer hours
( ) longer season
( ) Other (specify) __________________________

If "No", what factor(s) limit your operation to its present size?

____

____

____.

29. How do you feel about the future of your roadside market?

( ) very good
( ) good
( ) fair
( ) bad
( ) very bad

30. Would you like to receive a copy of the report generated from this survey?

( ) Yes
( ) No

31. Please use the space below to discuss any problems encountered or general feelings you may have about roadside market operations.

Thank you very much for your cooperation in this study. Please return the questionnaire to us in the enclosed envelope. If you answered yes to question 30 above, we will send you a summary of the results as soon as our analysis is completed.