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Effect of place of residence on consumer attitudes concerning fresh produce marketed through direct farm markets in West Virginia

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EFFECT OF PLACE OF RESIDENCE ON
CONSUMER ATTITUDES CONCERNING
FRESH PRODUCE MARKETING
THROUGH DIRECT FARM MARKETS IN
WEST VIRGINIA

Authors

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Effect of Place of Residence on Consumer Attitudes Concerning Fresh Produce Marketed Through Direct Farm Markets In West Virginia

Robert L. Jack and Kitty Lou Blackburn

Introduction

Direct marketing of fresh produce, an old concept, has taken on renewed interest in recent years. High retail food prices, concern for family health, and food quality are some of the reasons for this renewed interest by consumers.

Often producers are uncertain as to what consumers want in direct markets and consumers are uncertain as to what direct markets have to offer. Most of the research data on the topic are out of date.

In this study an attempt was made to examine relationships between place of residency (independent variable) and consumer attitudes, use, knowledge, purchase habits, and spending patterns (dependent variables). The findings should help improve direct marketing for the benefit of both producer and consumer.

Purpose of Study

1. To identify West Virginia consumer views concerning direct markets.
2. To determine consumer expectations and needs that must be satisfied to make direct markets successful.
3. To make recommendations for improving direct markets in West Virginia through the information obtained.

Procedures

Questionnaires were mailed to a sample of 5,000 West Virginia consumers randomly selected from telephone directories at the Morgantown office of the C & P Telephone Co., and included all West Virginia cities.

The first mailing of questionnaires with introductory letter was made during the week of November 16, 1981. A second mailing to the same addresses was made during the week of January 11, 1982, and included a second questionnaire and follow-up letter. There were 821 (16.42 percent) usable questionnaires returned.

Definitions

In this survey, four types of direct marketing outlets were defined as:

1. *Tailgate markets*—produce is sold from a parked vehicle.
2. *Roadside stands*—produce is sold from some type of permanent structure usually located beside a highway.
3. *Farmers' markets*—producers sell their produce at one central location. These markets may be sponsored by city, county, or state government or they may be operated independently.
4. *Pick-your-own operations* (PYO)—consumers harvest their own produce at the farm.

Rural, non-farm, and farm are areas outside cities, towns, and suburbs.

Characteristics of Sample

More than 55 percent of the West Virginia respondents reported annual household income of \$15,000 to \$39,000. Only 6.8 percent reported less than \$5,000, while slightly more than 8 percent had incomes of \$40,000 or more per year (Table 1). None of the farm respondents reported an annual family income of more than \$40,000.

Place of residence data show a higher percentage of respondents located in city, suburban, and town areas than expected in West Virginia. This may have occurred because of the procedure used in selecting the sample, only people with telephone service. More than 73 percent of the respondents lived in city, suburban, and town areas. Only 6.4 percent lived on a farm (Table 1).

More than 78 percent of the respondents had completed 9 to 16 years of schooling. As the place of residency became more rural, fewer years of schooling were reported (Table 2). Only 8.4 percent of the sample completed 0-8 years, while more than 13 percent had schooling beyond the four-year college degree.

The highest percentage of respondents, retired/disabled (23.8), lived mostly in the city and town areas. Next in importance was homemakers living in suburban and rural, non-farm areas (Table 3). The proportion of laborers living in rural, non-farm and farm areas was more than double those living in other areas.

Table 1.
Family Income and Place of Residence of Consumers, 1981.

Family Income and Place of Residence							
Place of Residence	Number	Annual Household Income in Thousand Dollars					
		Under 5	5-9	10-14	15-24	25-35	40 and Over
					percent*		
City	288	7.3	14.2	13.5	27.4	27.4	10.1
Suburban	132	5.3	10.6	10.6	28.8	28.0	16.7
Town	117	6.0	13.7	23.9	26.5	24.8	5.1
Rural, Non-Farm	150	7.3	12.7	18.0	28.0	30.7	3.3
Farm	47	8.5	21.3	48.9	48.9	4.3	0
Total	734	6.8	13.7	15.8	29.0	26	8.4

*Values in all tables may not add to 100 percent because of rounding, and all total numbers do not add to 821 because not all respondents answered each question.

Table 2.
Education and Place of Residence of Consumers, 1981.

Place of Residence	Number	Years of School				
		0-8	9-12	13-16	17 and Over	
						percent
City	292	6.5	49.7	28.8		15.1
Suburban	138	4.3	45.7	36.2		13.8
Town	121	8.3	45.5	33.1		13.2
Rural, Non-Farm	155	12.3	47.1	28.4		12.3
Farm	51	15.7	58.8	19.6		5.9
Total	757	8.4	48.3	30.0		13.3

Table 3.
Occupation and Place of Residence of Consumers, 1981.

Place of Residence	Number	Professional	Manager	Administrative	Clerical	Laborer	Retired/ Disabled	Homemaker	Other
									percent
City	299	16.7	3.3	4.7	7.4	27.4	15.7	24.7	
Suburban	139	19.4	5.0	3.6	7.9	18.0	22.3	23.7	
Town	123	13.0	4.1	3.3	7.3	30.9	16.3	25.2	
Rural, Non-Farm	155	11.6	1.9	4.5	16.8	13.5	23.2	28.4	
Farm	48	12.5	4.2	2.1	16.7	31.3	16.7	16.7	
Total	764	15.3	3.5	4.1	9.9	23.8	18.7	24.7	

Analysis

Sources of Produce

An average of 45.5 percent of all respondents reported that they grew none of the produce consumed annually by the family (Table 4). As expected, the percentage of non-growers was much higher in the more populated areas (city, suburban, and town) than in rural areas. Less than 10 percent of the respondents grew 81-100 percent of the produce their families consumed; 39.2 percent of farm families were in this category.

Gardens of friends and neighbors are important sources of produce for West Virginia families. Almost 29 percent of the respondents obtained 1 to 20 percent of their produce from them (Table 5). Rural residents were less dependent on this source than were residents of non-rural areas.

More than 62 percent of the respondents processed fruits and vegetables at home (Table 6). The proportion of farm and rural, non-farm families doing home processing was much higher than for other areas of residency.

Purchases

Respondents were asked how many different kinds of fresh fruits and vegetables they usually purchased on a weekly trip to direct markets or retail grocery stores. Regardless of place of residency, most reported buying one to three kinds of fruits and vegetables weekly (Table 7). In addition, regardless of place of residence, respondents bought a greater variety of vegetables than fruits. Almost twice as many respondents bought four to six kinds of vegetables per shopping trip as bought this many different kinds of fruit.

Respondents were asked what proportion of annual fresh fruit and vegetable purchases were made at retail stores and at direct markets. More than 43 percent of farm residents reported buying no fresh fruits and vegetables at retail stores (Table 8).

Respondents from rural areas purchased lower percentages of fresh fruits and vegetables at retail outlets than those from urban areas. For example, more than 31 percent of city residents, as contrasted to less than 6 percent of farm residents, reported buying 81-100 percent of their fresh fruits and vegetables at retail stores.

About 46 percent of the respondents reported that they purchased no fresh fruits and vegetables at direct markets (Table 9), double the percentage that reported buying no produce at retail stores in Table 8. About 36 percent of the respondents reported buying 1-20 percent of their annual produce from direct markets. Most of this group purchased around 10 percent from such markets. Rurality of place of residency seemed to have little effect on the proportion of

Table 4.
Proportion of Produce Consumed Annually by Consumers that Is Produced in Own Garden.

Proportion of Produce Consumed Annually by Class							
Place of Residence	Number	Percent from Own Garden					
		0	1-20	21-40	41-60	61-80	81-100
City	311	56.6	21.5	7.4	6.4	4.5	3.5
Suburban	142	46.5	19.0	9.2	12.8	7.7	4.9
Town	132	52.3	19.7	10.6	9.8	4.5	3.0
Rural, Non-Farm	161	28.6	19.3	12.4	14.9	18.0	8.1
Farm	51	11.8	13.7	7.8	17.6	9.8	39.2
Total	797	45.5	19.8	9.3	10.5	7.9	6.9

Table 5.
Proportion of Produce Consumed Annually by Consumers that Came from Gardens of Friends or Neighbors.

Place of Residence	Number	Percent from Gardens of Friends or Neighbors			
		0	1-20	21-40	41-100
City	311	60.5	29.9	6.8	2.9
Suburban	142	64.1	29.6	3.5	2.8
Town	132	55.3	33.3	1.5	9.9
Rural, Non-Farm	161	64.6	24.2	6.2	7.7
Farm	51	76.5	19.6	3.9	0
Total	797	62.1	28.6	5.0	4.3

Table 6.
Proportion of Consumers that Usually Process Fruits and Vegetables for Home Use.

Place of Residence	Number	Processing for Home Use	
		Yes	No
		percent	
City	311	47.9	52.1
Suburban	145	59.3	40.7
Town	132	68.2	31.8
Rural, Non-Farm	162	77.8	22.2
Farm	51	92.2	7.8
Total	801	62.2	37.8

households buying 1-20 percent of their annual fresh fruits and vegetables at direct markets.

Awareness of Direct Markets

"Passing by on road" was the response given by the largest proportion of respondents in all places of residency when they were asked how they first learned of direct markets in their area (Table 10). A newspaper story was the most important source for pick-your-own operations. Information about farmers' markets was usually obtained by word-of-mouth or advertisements. More than 40 percent of the respondents listed passing by on road as the way they learned about roadside and tailgate markets.

When respondents were asked if they had ever seen or heard advertisements promoting direct markets, about 9 percent reported they had for roadside and tailgate markets. However, 36.2 and 12.3 percent, respectively, reported seeing or hearing advertisements for farmers' markets and pick-your-own operations (Table 11). This result is consistent with the data reported in Table 10.

Miles to Direct Markets (Round Trip)

The largest proportion of respondents in all places of residence reported that they lived within five miles (round trip) of a direct market (Table 12). In most cases, a large proportion of the respondents traveled 25 miles or more to pick-your-own markets while round trip distance to roadside, tailgate and farmers' markets was less than five miles.

Table 7.
Proportion of Consumers Who Indicated the Number of Different Kinds of Fresh Fruits and Vegetables Purchased Weekly.

Place of Residence and Type of Market	Number Purchased Weekly							
	Fresh Fruits				Fresh Vegetables			
	Number	percent			Number	percent		
		1-3	4-6	>6		1-3	4-6	>6
City								
Direct Markets	90	85.6	14.4	0	93	58.1	37.6	4.3
Grocery Store	251	90.8	8.8	.4	261	66.7	30.7	2.6
Suburban								
Direct Markets	45	80.0	15.6	4.4	45	60.0	33.3	6.7
Grocery Store	120	85.0	14.2	.8	124	66.1	29.8	4.1
Town								
Direct Markets	37	86.5	13.5	0	35	62.9	34.3	2.8
Grocery Store	109	88.1	10.1	1.8	109	67.0	29.4	3.7
Rural, Non-Farm								
Direct Markets	41	90.2	9.8	0	41	61.0	34.1	4.9
Grocery Store	135	85.9	13.3	.7	132	60.6	37.1	2.3
Farm								
Direct Markets	17	82.4	11.8	5.9	12	75.0	25.0	0
Grocery Store	31	90.3	9.7	0	37	73.0	21.6	5.4

Table 8.
Proportion of Produce Consumed Annually by Consumers that Is Purchased at Retail Stores.

Place of Residence	Number	Percent Purchased at Retail Stores					
		0	1-20	21-40	41-60	61-80	81-100
City	311	20.6	7.4	8.0	12.9	19.3	31.8
Suburban	142	17.6	14.1	16.2	11.3	9.2	31.7
Town	132	22.0	9.1	6.8	12.1	21.2	28.8
Rural, Non-Farm	161	24.8	19.3	12.4	10.6	18.0	14.9
Farm	51	43.1	25.0	2.0	9.8	13.7	5.9
Total	797	22.6	12.4	9.8	11.8	17.2	26.2

Table 9.
Proportion of Produce Consumed Annually by Consumers that Is Purchased at Direct Markets.

Place of Residence	Number	Percent Purchased at Direct Markets					
		0	1-20	21-40	41-60	61-80	81-100
City	311	45.3	34.1	11.6	6.4	1.0	1.6
Suburban	142	42.3	38.7	9.9	6.3	2.1	.7
Town	132	47.7	43.2	5.3	3.0	0	.8
Rural, Non-Farm	161	50.3	34.2	8.1	5.5	1.9	0
Farm	51	49.0	41.2	5.8	2.0	0	2.0
Total	797	46.4	36.8	9.3	5.4	1.1	1.0

Table 10.
How Consumers First Learned about Direct Markets in the Area.

Place of Residence/ Type of Direct Market	Number	How First Learned of Direct Markets					
		Word of Mouth	Passing by Road	Roadside Sign	Advertisement	Newspaper Story	Other
		percent					
City							
Roadside	175	6.3	49.1	3.4	1.1	13.7	26.3
Tailgate	144	9.0	40.9	2.8	11.1	20.1	16.0
Farmers' Market	210	26.2	10.5	3.3	21.9	12.4	25.7
Pick-your-own	94	26.6	3.2	2.1	3.2	48.9	16.0
Total	623	16.7	27.1	3.1	10.8	20.1	22.2
Suburban							
Roadside	83	4.3	39.8	3.2	1.1	18.3	33.3
Tailgate	70	7.1	40.0	2.9	8.6	21.4	20.0
Farmers' Market	98	21.4	7.1	2.0	25.5	10.2	33.7
Pick-your-own	55	27.3	0	0	9.1	43.6	20.0
Total	316	14.2	22.8	2.2	11.7	20.9	28.2
Town							
Roadside	83	6.0	45.8	6.0	1.2	14.5	26.5
Tailgate	70	7.1	52.6	1.4	5.7	14.3	18.6
Farmers' Market	81	30.9	18.5	1.2	17.3	13.6	18.5
Pick-your-own	44	22.7	9.1	9.1	11.4	36.4	11.4
Total	278	16.2	33.8	4.0	8.6	17.6	19.8

Table 10. (continued)
How Consumers First Learned about Direct Markets in the Area.

Place of Residence/ Type of Direct Market	How First Learned of Direct Markets						
	Number	Word of Mouth	Passing by on Road	Roadside Sign	Advertisement	Newspaper Story	Other
Rural, Non-Farm					percent		
Roadside	113	8.0	47.8	2.7	1.8	10.6	29.2
Tailgate	82	12.2	48.8	0	4.9	19.5	14.6
Farmers' Market	105	28.6	21.0	0	14.3	18.1	18.1
Pick-your-own	64	28.1	4.7	3.1	10.9	32.8	20.3
Total	364	18.4	32.7	1.4	7.7	18.7	21.2
Farm							
Roadside	35	8.6	45.7	11.4	2.9	11.4	20.0
Tailgate	23	8.7	47.8	4.3	13.0	13.1	13.1
Farmers' Market	30	26.7	6.7	10.0	20.0	3.3	33.3
Pick-your-own	22	18.2	13.6	4.5	9.1	36.4	18.2
Total	110	15.5	29.1	8.2	10.9	14.5	21.8

Table 11.
Proportion of Consumers Who Had Seen or Heard Advertisements Promoting Direct Markets.

Place of Residence	Number	Market Type			
		Roadside	Tailgate	Farmers' Markets	Pick-Your-Own
				percent	
City	313	11.2	11.2	38.7	11.2
Suburban	146	4.8	9.6	43.2	13.0
Town	135	6.7	8.1	37.0	11.1
Rural, Non-Farm	162	11.1	8.0	25.3	14.2
Farm	51	13.7	5.9	33.3	13.7
Total	807	9.4	9.4	36.2	12.3

Table 12.
Miles from Home to Direct Market (Round Trip).

Place of Residence/ Type of Direct Market	Number	Miles from Home to Direct Market (Round Trip)					percent
		Under 5	5-9.9	10-14.9	15-19.9	20-24.9	25 and Over
City							
Roadside	88	50.0	18.2	14.8	3.4	6.8	6.8
Tailgate	70	67.1	24.3	4.3	2.9	0	1.4
Farmers' Market	143	55.9	21.7	10.5	0	5.6	6.3
Pick-your-own	30	3.3	10.0	30.0	10.0	13.3	33.3
Total	331	52.0	20.2	12.1	2.4	5.4	7.9
Suburban							
Roadside	41	26.8	24.4	31.7	4.8	0	12.2
Tailgate	38	52.6	31.6	13.2	0	0	2.6
Farmers' Market	62	30.6	27.4	17.7	6.5	14.5	3.2
Pick-your-own	15	6.7	20.0	6.7	0	20.0	46.7
Total	156	32.7	26.9	19.2	3.8	7.7	9.6
Town							
Roadside	40	42.5	25.0	15.0	2.5	0	15.0
Tailgate	35	51.4	20.0	5.7	2.7	2.7	14.3
Farmers' Market	36	36.1	19.4	25.0	0	8.3	11.1
Pick-your-own	8	0	0	25.0	0	37.5	37.5
Total	119	40.3	20.2	16.0	1.7	6.7	15.1

Table 12. (continued)

Rural, Non-Farm							
Roadside	54	24.1	27.8	14.8	16.7	9.8	9.3
Tailgate	38	31.6	28.9	18.4	5.3	13.2	2.6
Farmers' Market	46	23.9	8.7	23.9	8.7	15.2	19.6
Pick-your-own	23	8.7	8.7	17.4	4.3	21.7	39.1
Total	161	23.6	19.9	18.6	9.9	13.0	14.9
Farm							
Roadside	25	44.0	0	24.0	16.0	8.0	8.0
Tailgate	18	38.9	27.8	5.6	11.0	0	16.7
Farmers' Market	17	11.8	0	29.4	17.6	23.5	17.6
Pick-your-own	12	8.3	16.7	8.3	16.7	8.3	41.7
Total	72	29.2	9.7	18.1	15.3	9.7	18.1

Comparison of Quality and Price

Regardless of where they lived, more than half of the respondents believed the quality of fruit and vegetables produced in West Virginia was about the same as the quality of produce grown outside the state (Table 13). Although 38 percent of all respondents ranked West Virginia produce as better, a lower percentage of respondents living on farms and in towns ranked it better.

Table 13.
Comparison of Quality of West Virginia Produce
with Quality of Produce Grown Out-of-State.

Place of Residence	Number	About the Same	Better	Worse
		percent		
City	214	58.9	38.3	2.8
Suburban	104	50.0	39.4	10.6
Town	92	59.8	33.7	6.5
Rural, Non-Farm	98	55.1	41.8	3.1
Farm	31	61.3	32.2	6.5
Total	539	56.8	38.0	5.2

Respondents, regardless of place of residency, believed that the quality of produce purchased at direct markets was better than quality of produce purchased at grocery stores (Table 14). More than 38 percent of all respondents in all residencies ranked the quality of produce purchased at direct markets as excellent, while only about 5 percent ranked grocery store produce this high. Only a low percentage ranked produce purchased from direct markets or grocery stores as poor.

About 60 percent of all respondents believed produce purchased directly from the farmer was priced lower than produce purchased in grocery stores (Table 15). Slightly more than 8 percent said farm produce was priced higher. The data from the more rural places of residency showed that a higher percentage of these respondents believed produce purchased from direct markets was lower priced than that purchased in grocery stores.

Expenditures for Produce

Regardless of where they lived, the highest percentage of respondents indicated they spent from \$1 to \$50 in 1981 for produce purchased at direct markets. A higher percentage farm respondents than any other group spent \$1 to \$50 for produce purchased from direct markets (Table 16).

Table 14.

Quality Rating of Produce Purchased at Direct Markets and Grocery Stores.

Place of Residence	Source of Purchase	Quality Rating			
		Poor	Fair	Good	Excellent
		percent			
City	Direct Markets	2.1	8.8	47.3	41.8
	Grocery Stores	2.9	38.6	51.1	7.5
Suburban	Direct Markets	0.9	4.4	55.8	39.9
	Grocery Stores	7.4	41.5	45.2	5.9
Town	Direct Markets	0	8.3	53.1	38.5
	Grocery Stores	4.8	44.8	45.6	4.8
Rural, Non-Farm	Direct Markets	0.8	5.7	52.8	40.7
	Grocery Stores	8.7	47.3	40.0	4.0
Farm	Direct Markets	2.6	5.3	50.0	42.1
	Grocery Stores	6.7	51.1	37.8	4.4

Table 15.

Price of Produce Purchased Directly from Farmers
Compared to Grocery Store Prices.

Place of Residence	Number	About the Same	Higher	Lower
		percent		
City	203	38.9	10.3	50.8
Suburban	95	40.0	6.3	53.7
Town	72	25.0	9.7	65.3
Rural, Non-Farm	94	25.5	5.3	69.2
Farm	35	20.0	8.6	71.4
Total	499	33.3	8.4	58.3

More than 39 percent of respondents in all places of residency indicated they spent \$5 to \$9.99 during each visit to direct farm markets (Table 17). In most cases the greatest expenditures per visit were made at pick-your-own and farmers' markets. Except for farm respondents, about 25 percent of the other groups spent under \$5 per visit.

Table 16.
Total Annual Spending in 1981 for Produce Purchased at Direct Markets.

Place of Residence	Number	\$1-50	\$51-100	\$101-\$150	\$150-200	Over \$200
				percent		
City	139	41.7	34.5	7.9	3.6	12.2
Suburban	73	46.4	17.8	9.6	13.7	12.3
Town	50	48.0	32.0	8.0	8.0	4.0
Rural, Non-Farm	69	39.1	27.5	10.2	10.2	13.0
Farm	26	50.0	26.9	7.7	3.9	11.5
Total	357	43.7	28.9	8.7	7.6	11.2

Table 17.
Average Expenditure on Fresh Produce Per Visit at Direct Markets
by Different Types of Residence in West Virginia.

Place of Residence/ Type of Direct Market	Number	Average Expenditure				
		Under \$5.00	\$5.00 to \$9.99	\$10.00 to \$14.99	\$15.00 to \$19.99	Over \$20.00
				percent		
City						
Roadside	119	29.4	44.5	17.6	4.2	4.2
Tailgate	84	31.0	51.2	14.3	1.2	2.4
Farmers' Market	143	12.6	44.1	27.3	9.1	7.0
Pick-your-own	39	30.8	25.6	23.1	5.1	15.4
Total	385	23.6	43.9	21.0	5.5	6.0

Table 7. (continued)

Suburban									
Roadside	62	33.9	45.2	12.9	4.8	3.2			
Tailgate	43	32.6	46.5	11.6	4.7	4.7			
Farmers' Market	68	16.2	35.3	33.8	11.8	2.9			
Pick-your-own	16	31.3	12.5	43.8	6.3	6.3			
Total	189	27.0	39.2	22.8	7.4	3.7			
Town									
Roadside	50	38.0	44.0	14.0	4.0	0			
Tailgate	39	28.2	59.0	7.7	2.6	2.6			
Farmers' Market	44	18.2	43.2	22.7	2.3	13.6			
Pick-your-own	8	25.0	50.0	0	12.5	12.5			
Total	141	28.4	48.2	14.2	3.5	5.7			
Rural, Non-Farm									
Roadside	67	34.3	50.7	10.4	4.5	0			
Tailgate	40	52.5	47.5	0	0	0			
Farmers' Market	64	6.3	37.5	40.6	9.4	6.3			
Pick-your-own	24	16.7	16.7	25.0	8.3	33.3			
Total	195	26.7	41.5	20.0	5.6	6.2			
Farm									
Roadside	28	14.3	53.6	17.6	3.6	10.7			
Tailgate	24	33.3	41.7	16.7	4.2	4.2			
Farmers' Market	25	8.0	52.0	16.0	12.0	12.0			
Pick-your-own	9	22.2	22.2	22.2	11.1	22.2			
Total	86	18.6	46.5	17.4	7.0	10.5			

Weekly expenditures for produce during the growing season (June–October) and the rest of the year (November–May) showed more than half of the respondents in all places of residency spent \$1 to \$10 weekly during both time periods (Table 18). Except for farm residents, there was no firm evidence that respondents spent greater amounts weekly on produce out-of-season than in season.

Important Factors

Respondents were asked to rank from not important to very important, listed characteristics pertaining to their purchases of produce. Regardless of place of residence, the respondents ranked quality most important, prices and appearance were second or third (Table 19). “Where grown” was mentioned as not being important by more than 30 percent of all respondents.

Respondents who used direct markets were asked to check the most important reasons why they shopped at them. Quality, followed by price, was mentioned by all respondents as the most important reason for buying at such markets (Table 20). In all cases, good prices at pick-your-own operations had a higher proportion of responses than for other types of direct markets. Nice atmosphere and convenience were rated as being less important than other reasons. Respondents in all areas of residency tended to give similar ratings of importance to all of the selected characteristics.

Respondents gave several reasons for nonuse or dislike of direct markets (Table 21). However, the two most important reasons given by all areas of residency were “none nearby” and “inconvenient.” These two reasons combined accounted for more than 72 percent of all reasons for nonuse or dislike. Poor quality was not cited as an important reason. All respondents saw limited volume and variety as a bigger problem than high prices, especially for roadside and tailgate markets. High prices were considered a bigger problem at roadside and farmers’ markets. “None nearby” was given by almost two-to-one of the respondents for pick-your-own over the other types of markets. The largest proportion (21.3 percent) of the respondents mentioned lower prices when asked what changes farmers could make that would increase the use of direct markets (Table 22). Better locations was the second most important change mentioned and was followed by more markets. Most respondents did not indicate that sanitation or insufficient advertisement were major problems. People living in town gave more weight to better location, while city, suburban, and farm residents gave more weight to lower prices. Rural, non-farm residents gave a slight advantage to more markets.

Respondents were asked to indicate weekdays, weekends, or no preference as the days they would like to see direct markets open for business. About 40 percent preferred weekends to weekdays (Table 23). In addition, more than 37 percent stated no preference for days to be open for business. Farm

Table 18.
Weekly Expenditures for Produce by Season of Year.

Place of Residence	Season of Year	Weekly Expenditures				
		\$1-10	\$11-20	\$21-30	Over \$30	
			percent			
City	Growing Season ¹	58.1	27.6	8.3	6.0	
	Rest of Year ²	63.0	25.5	6.3	5.3	
Suburban	Growing Season	53.1	35.7	8.2	3.1	
	Rest of Year	58.8	29.9	6.2	5.2	
Town	Growing Season	60.3	19.2	11.0	9.6	
	Rest of Year	55.3	28.9	10.5	5.3	
Rural, Non-Farm	Growing Season	69.1	16.4	10.0	4.5	
	Rest of Year	58.4	23.0	9.8	8.8	
Farm	Growing Season	61.8	29.4	2.9	5.9	
	Rest of Year	55.3	13.2	18.4	13.2	

¹June–October

²November–May

Table 19.
Importance of Selected Characteristics When Buying Fresh Produce.

Place of Residence	Attribute	Number	Importance			
			Not Important	Somewhat Important	Important	Very Important
City	Appearance	305				
	Where Grown	390	1.0	3.9	21.0	74.1
	Quality	300	30.3	31.0	24.1	14.5
	Price	303	0.3	0	9.0	91.0
Suburban	Total	1,198	2.0	10.0	25.4	62.7
	Appearance	140	8.2	11.0	19.9	61.0
	Where Grown	132	1.4	5.0	21.4	72.1
	Quality	144	34.0	32.0	19.7	14.4
Town	Price	142	1.4	1.4	9.7	88.0
	Total	558	2.1	7.7	36.0	54.2
	Appearance	126	9.3	11.1	21.7	57.9
	Where Grown	122	0.8	5.6	19.0	74.6
	Quality	131	32.0	32.0	27.0	9.0
	Price	130	0	0.7	15.3	83.9
	Total	509	2.3	5.4	23.8	68.5
			8.4	10.6	21.2	59.7

Table 19. (continued)

Rural, Non-Farm	Appearance	156	1.3	5.1	21.2	72.0
	Where Grown	150	38.7	32.0	18.0	11.3
	Quality	157	0.6	0.6	19.7	78.9
	Price	159	1.2	6.3	28.9	63.5
Farm	Total	622	10.1	10.8	22.0	56.9
	Appearance	45	0	0	20.0	80.0
	Where Grown	46	37.0	26.1	24.0	13.0
	Quality	48	0	0	14.6	85.4
	Price	48	2.1	6.2	22.9	68.7
	Total	187	9.6	8.0	20.3	62.0

Table 20.
Important Reasons for Shopping at Direct Markets.

Place of Residence/ Type of Direct Market	Number	Reasons				
		Good Prices	Quality	Atmosphere	Convenience	Like to Help Farmers
City				percent		
Roadside	98	66.3	75.5	21.4	41.8	40.8
Tailgate	73	67.1	69.9	17.8	42.5	45.2
Farmers' Market	130	61.5	77.7	37.0	40.8	41.5
Pick-your-own	46	80.4	65.2	26.1	13.0	28.3
Total	347	66.5	73.8	27.1	37.8	40.3
Suburban						
Roadside	56	66.1	67.8	17.8	44.6	42.8
Tailgate	32	56.2	62.5	15.6	40.6	40.6
Farmers' Market	63	46.0	88.9	31.7	38.1	46.0
Pick-your-own	15	86.7	60.0	13.3	20.0	6.7
Total	166	58.4	74.1	22.3	39.2	40.4
Town						
Roadside	43	70.0	72.1	14.0	41.9	23.2
Tailgate	36	86.1	61.1	11.1	36.1	41.7
Farmers' Market	51	66.7	72.5	37.2	31.4	51.0
Pick-your-own	15	86.7	60.0	40.0	13.3	13.3
Total	145	74.5	68.3	24.1	33.8	36.5

Table 20. (continued)

Rural, Non-Farm						
Roadside	53	68.0	69.8	17.0	47.2	51.0
Tailgate	34	67.6	73.5	17.6	32.4	52.9
Farmers' Market	63	63.5	77.8	44.4	38.1	44.4
Pick-your-own	24	83.3	66.7	50.0	4.2	29.2
Total	174	68.4	73.0	31.6	29.3	46.0
Farm						
Roadside	25	60.0	64.0	32.0	56.0	36.0
Tailgate	19	63.2	63.2	26.3	47.4	21.1
Farmers' Market	25	72.0	68.0	40.0	24.0	44.0
Pick-your-own	15	73.3	46.7	20.0	6.7	40.0
Total	84	66.7	11.9	31.0	35.7	35.7

Table 21.
Reasons for Nonuse of Dislike of Direct Markets.

Place of Residence/ Type of Direct Market	Number	Reasons				Limited Volume/ Variety
		Prices Too High	Poor Quality	None Nearby	Inconvenient	
City				percent		
Roadside	168	20.8	5.4	39.3	33.9	19.0
Tailgate	156	11.5	5.8	36.5	24.4	29.5
Farmers' Market	170	22.4	7.0	33.5	33.5	14.7
Pick-your-own	143	3.5	0.7	63.6	38.5	7.0
Total	637	15.1	4.9	42.5	32.5	17.7
Suburban						
Roadside	80	16.3	6.2	41.2	71.2	40.0
Tailgate	71	8.4	8.4	49.3	11.3	23.9
Farmer's Market	72	23.6	8.3	38.9	31.9	18.1
Pick-your-own	63	0	0	74.6	30.2	1.6
Total	286	12.6	5.9	50.0	24.5	17.1

Table 21. (continued)

Town	84	14.3	4.7	54.8	30.9	25.0
Roadside	73	8.2	5.5	50.7	26.0	28.8
Tailgate	75	15.0	3.0	48.0	40.0	15.0
Farmers' Market	64	1.6	1.6	73.4	29.7	3.1
Pick-your-own	296	10.1	3.7	56.1	31.8	18.6
Total	91	17.6	7.7	37.4	25.3	23.1
Rural, Non-Farm	85	11.8	17.6	41.2	22.4	30.6
Roadside	82	12.2	2.4	54.9	28.0	9.8
Tailgate	76	2.6	0	68.4	28.9	6.6
Farmers' Market	334	11.4	7.2	49.7	26.0	18.0
Pick-your-own	25	36.0	12.0	40.0	20.0	36.0
Total	23	13.0	13.0	43.5	13.0	34.8
Farm	24	41.7	16.7	33.3	38.0	16.7
Roadside	17	11.8	5.9	76.5	23.5	23.5
Tailgate	89	27.0	12.4	46.1	26.6	28.1
Farmers' Market						
Pick-your-own						
Total						

Table 22.
Suggested Changes Farmers Could Make that Would Increase Use of Direct Markets.

Place of Residence	Number	Suggestion for Improvement			
		Better Location	Lower Prices	Advertise	More Markets
				percent	
City	116	15.5	25.9	10.3	14.6
Suburban	51	19.6	23.5	19.6	5.9
Town	57	24.6	12.3	15.8	19.3
Rural, Non-Farm	67	11.9	17.9	13.4	19.4
Farm	19	10.5	26.3	10.5	15.8
Total	310	16.8	21.3	13.5	15.2
					8.1

Table 23.
Days Preferred for Direct Markets to Be Open for Business.

Place of Residence	Number	Weekdays	Weekends	No Preference
			percent	
City	313	29.4	39.6	40.3
Suburban	146	32.2	42.4	34.9
Town	135	28.9	40.0	39.3
Rural, Non-Farm	162	35.8	42.6	33.3
Farm	51	23.5	29.4	51.0
Total	807	30.7	40.1	37.9

Respondents could indicate more than one day

respondents had the largest proportion of no preference responses (51.0 percent).

There was no clear preference as to the time of day that total respondents wanted direct markets to be open for business. The largest proportion indicated no preference (40 percent), Table 24. Almost 30 percent suggested evenings, 24 percent wanted afternoons, and around 23 percent wanted morning hours of operation. Place of residency seemed to have little effect on hours preferred.

Summary and Recommendations

In recent years, the interest in direct marketing of fresh produce has been increasing. Little research data are available to help producers and consumers in West Virginia make decisions about direct markets and purchasing. In this study the relationships were examined between place of residency and consumer attitudes, use, knowledge, purchase habits, and spending habits. The four types of direct markets used in this study were (1) tailgate markets; (2) roadside stands; (3) farmers' markets; and (4) pick-your-own operations.

Over half of the respondents reported incomes in the range of \$15,000 to \$39,000. Almost three-fourths resided in cities, suburbs, or towns. More than 78 percent of the respondents completed 9 to 16 years of schooling and more than 13 percent completed more than the four years required for a college degree. Retired, disabled respondents lived mostly in city and town areas and homemakers lived mostly in rural, non-farm and suburban areas.

The percentage of respondents who grew some of their own produce was lower in the more populated areas than rural areas. Gardens of friends and

Table 24.
Time of Day Preferred for Direct Markets to Be Open for Business.

Place of Residence	Number	Mornings	Afternoons	Evenings	No Preference
		percent			
City	313	26.0	26.2	29.4	34.8
Suburban	146	28.1	25.3	30.1	37.0
Town	135	17.0	22.9	25.2	48.9
Rural, Non-Farm	162	20.4	20.4	36.4	40.1
Farm	51	9.8	21.6	19.6	54.9
Total	807	22.7	24.0	29.6	40.0

Respondents could indicate more than one time.

neighbors served as a source of produce for a lower percentage of rural residents than for residents in other areas. Home processing of fruits and vegetables was done by a much higher percentage of rural residents than residents of other areas.

In all places of residency most residents bought one to three different kinds of fruits and vegetables weekly. Almost twice as many respondents bought four to six kinds of vegetables weekly as did those who bought four to six kinds of fruits. Residents in rural areas purchased fewer fresh fruits and vegetables at retail stores. Almost half of the respondents purchased no fresh fruits or vegetables at direct markets. Most of the respondents who did purchase fresh produce at direct markets only purchased 10 percent or less of their total produce at these markets.

The largest proportion of respondents in all places of residency first learned about direct markets in their area by passing by them on the road. Farmers' markets were usually first learned about by word-of-mouth or advertisements and pick-your-own operations were usually first learned about by newspaper stories. Over a third of the respondents reported seeing or hearing advertisements for farmers' markets, and slightly more than 12 percent saw or heard ads for pick-your-own operations. Advertisements were seen or heard for tailgate markets and roadside stands by only 9 percent of the respondents.

The majority of respondents in each place of residency traveled five miles or less per round trip to a direct market, but 20 miles or more per round trip to pick-your-own operations.

More than half of the respondents in each place of residency judged the quality of fresh fruits and vegetables grown in West Virginia to be about the same as that grown out of state. Fewer rural farm residents than residents in other areas rated West Virginia produce better than that grown elsewhere. The highest percentage (about 38 percent) of all respondents rated the quality of fresh produce found at direct markets as excellent, while only 5 percent rated grocery store quality as excellent. Almost 60 percent of the respondents thought produce purchased at direct markets was priced lower than produce purchased at grocery stores. More rural residents than others thought prices were lower at direct markets. Most respondents spent from \$1 to \$50 at direct markets in 1981. Rural farm residents generally spent less than others. Per visit expenditures ranged from \$5 to \$9.99 for over a third of the respondents. The highest expenditures per visit were at farmers' markets and pick-your-own operations. For all respondents, except farm residents, per weekly expenditure on fresh produce did not vary much between the growing season and the rest of the year. Most spent \$10 or less weekly.

Quality was regarded as the most important characteristic of fresh produce, with price second and appearance third. Reasons given for shopping at direct markets included quality, price, nice atmosphere, and convenience. The two

most important reasons for nonuse or dislike were none nearby and inconvenient.

Respondents listed changes that would increase their use of direct markets. These included lower prices, better locations, better sanitation, and more markets. Only a slightly higher percentage of respondents preferred weekends to weekdays as days of operations. There was also no great preference for time of day for the market to be open. Evenings were the most frequently listed, but only by a low percentage.

Recommendations

Rural residents generally make less use of direct markets as a source of fresh produce than residents of other areas. The main reason for this is that rural residents grow and preserve most of their fruits and vegetables. Respondents who lived in rural areas also generally had smaller incomes than those in the cities, suburbs, or towns.

Direct markets could be used by rural residents as a way to increase their earnings. Extra fresh produce could be sold through direct markets. This would also benefit consumers because they would have more direct markets to shop at and a larger variety of fresh produce to choose from.

To help ensure a successful market there are several recommendations the producer should follow:

1. Be aware of any regulations that may apply to the market and also be sure to purchase any licenses that may be needed.
2. The locations of the market should be considered carefully. Some possible locations include near shopping centers, on regularly traveled commuter routes, and near recreation areas. The location should also have space for parking and easy entry and exit.
3. The produce should be clean, neat, and out of the sun, if possible. The vehicle or stand should also be clean and sanitary and the sellers should also be clean and neat.
4. Advertising should be used to let consumers know about the markets. Roadside signs, newspaper ads, and radio ads are three methods which can be used. They should let the consumer know what produce is available, prices, and hours open.