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ABSTRACT

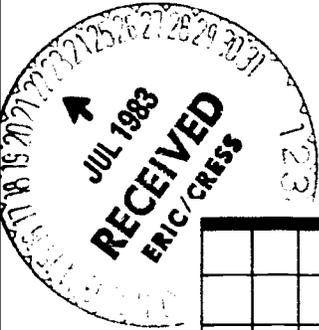
As a result of trends toward increasing instead of decreasing population growth in rural areas (as confirmed by the 1980 Census of Population), a sample of 2,752 rural residents from 967 households in 9 West Virginia counties were surveyed in 1981 to gain information that might be useful in public policy, education, and related programs. The sample was a relatively heterogenous group, representing a broad cross section with respect to socioeconomic characteristics (housewives, students, and retired persons accounted for a relatively large proportion of household members). Although low household incomes were reported fairly frequently, intermediate income levels were more typical, and a substantial number were relatively high. Educational levels among adults varied considerably. Income, education, and household composition were important socioeconomic factors that were related to other characteristics or attitudes of the persons interviewed. Several characteristics tended to vary with location (communities, residences, and individuals); however, a central coal mining county was similar to the southern coal mining counties. The majority of in-migration seemed to be from out-of-state and has become more common during the last 10 years, with more during the last 5 years. (AH)

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Characteristics of Rural Residents in West Virginia

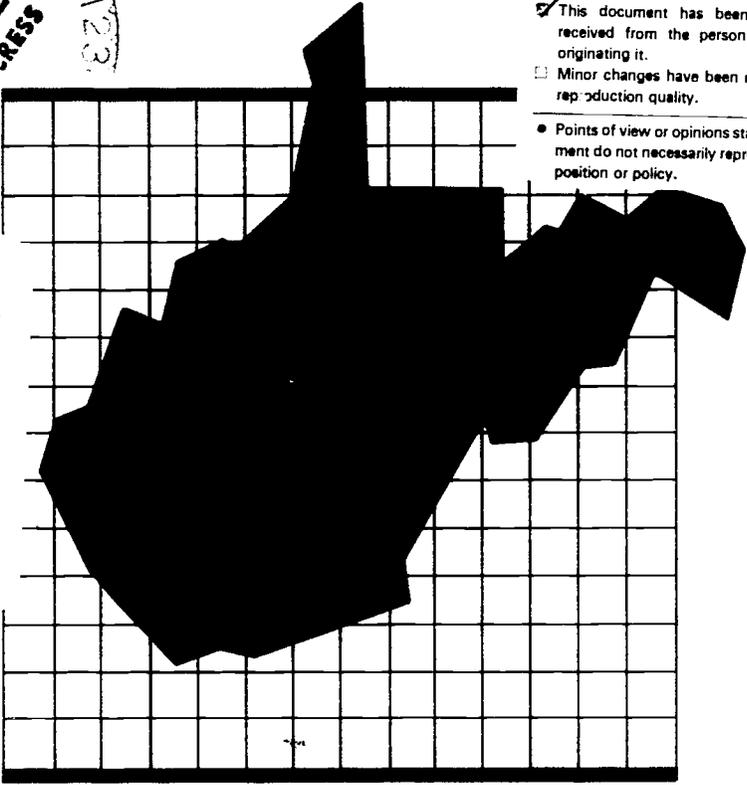
Results of a 1981 Survey in Nine Counties



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Characteristics of Rural Residents in West Virginia: Results of a 1981 Survey in Nine Counties

Dale Colyer, Dennis Smith, Anthony Ferrise, and Edwin Akamonu

Introduction

In the summer of 1981 a sample survey of rural residents was conducted in nine West Virginia counties, located in different areas of the State (Figure 1). Although the counties were not selected at random, they were representative of their areas and, as a group, the State. The purpose of the survey was to obtain information about residents of rural areas—information that might be useful in public policy, educational, and related programs.

A major consideration in the decision to conduct the survey was the reversal of long-term trends in population growth and the economic situation of rural areas. Prior to about 1968, population in West Virginia, and especially in most of its rural areas, had been declining steadily. But, as the 1980 Census of Population confirmed, population grew during the 1970s in nearly all areas in the State including the more rural counties. The economies of most rural areas have changed from declining to expanding and problems of growth have replaced those of decline.

However, relatively little is known about the residents in rural areas, especially those who account for the population increases. It was not known, for example, whether the increases were due primarily to in-migration or to less out-migration. Similarly little was known about the jobs of the rural residents, the land they occupy, what they produced, or how they regarded their situation. Thus, a questionnaire was designed to obtain information that could increase knowledge about the new situation in rural areas of the State.

Procedures

Nine counties were selected for the rural development survey. The counties were selected to obtain representation throughout the State and to assure a wide variety with respect to the importance of economic activities such as agriculture and mining, income levels, and related characteristics. Thus, the counties were not randomly selected and the results can not be generalized for the State in a statistical sense.

Personal interviews were used to obtain information from a random sample of persons in unincorporated areas of each county. Within each county, a rural residence near the starting point of each day's interviewing was selected at random and then each tenth to twentieth house, depending on the density of

the rural population, was selected for interviewing. The interviewing routes were selected to assure county-wide coverage. The interviews were conducted by West Virginia University students, except for one county where local school teachers were hired.

A questionnaire was used to obtain information about the socio-economic characteristics of the rural residents, the places where they live, data on migration (moving), production activities, problems, needs, and attitudes. A portion of the questionnaire was concerned with measuring satisfaction with 26 services. Respondents rated each service on a scale of one (1) for very satisfied, to five (5) for very dissatisfied. In the analyses these scores were used as both categories to classify responses and as cardinal measures to quantify responses, i.e., to obtain average scores for the sample and subgroups within the sample. In this scale, higher average scores indicate less satisfaction, with a score of more than three representing relatively greater dissatisfaction.

A variety of descriptive and statistical procedures were used to analyze the results. These included means and counts classified in various ways, Chi-square analyses, analysis of variance, Duncan's multiple range tests, and regression analyses. The combination of procedures allows determination of significant relationships and the quantitative or directional nature of the relationships.

Survey Results

A total of 2,752 persons in the 967 households were surveyed (average of 2.85 persons per household). In addition to socio-economic information about the household, data were collected about the places the residences were located, about production activities carried out on the places, work related information, satisfaction with services, information needs, sources of information, and credit. Results are reported by county, area, and factors associated with variability.

Several factors can influence or be associated with variations in the characteristics and attitudes of people. Among these are location, socio-economic characteristics, and migration variables. A number of different variables for each of these three broad categories were used to analyze the results to determine the interrelationships that exist among them. The results of this analysis provide useful information for those who provide services or are involved in making decisions for rural areas. A variety of information is provided since not everyone wants or needs the same data.

Location

The primary location variables are county and area of the State. The survey included nine counties located in the Northern and Eastern Panhandles, central, and southern areas of the State. There were significant differences in nearly all of the characteristics when computed as county averages, although some characteristics tended to be similar in some of the counties (Tables I-VIII).

Counties located in a general area tended to be similar. Those in the southern coal-producing area, for example, generally had similar characteristics. Although similar, there were differences among those counties located relatively close to one another. Webster County, for example,

located in central West Virginia, frequently tended to be similar in characteristics to the southern counties. The more important similarities and differences will be discussed in the following sections.

Characteristics of Places

The average size of places varied from 182 acres in Hardy County to 8 acres in Raleigh County. The sizes were larger in Jefferson and Doddridge counties where farming is more prevalent. More than 34 percent of the places were full or part-time farms in Jefferson County, followed by 26 percent in Hardy, 23 percent in Doddridge, and 18 percent in Upshur. These were places where farm products were produced and sold. There were no full-time farms among the places where interviews were conducted in McDowell, Raleigh and Webster counties, but there were a few part-time farms in each county. Although no farm products were produced for sale, many other persons considered their places to be "farms." The majority of the places were used primarily for residential purposes in all nine counties, varying from 61 percent in Jefferson County to nearly 97 percent in Webster County.

The average size of place and percentage used for farming tended to be higher in the eastern and central counties (except Webster) and lower in all the southern counties and in Marshall in the Northern Panhandle, as well as in Webster County. Marshall is a small county in a relatively heavily populated and industrialized area. The southern counties are characterized by very rough terrain, little level land, coal production as an important enterprise, and relatively concentrated land ownership. Webster County is similar to the southern counties with respect to most of these characteristics. It is one of the most remote and inaccessible counties in the State.

While the general conditions with respect to land ownership vary considerably among these counties, the majority of the rural residents included in the survey own all or a part of the parcel of land where they live. This varied from about 75 percent of the interviewees in Jefferson County to 99 percent in Raleigh County—overall, about 88 percent owned some land. Non-owners generally rented the places where they lived although a few had other arrangements including free use of the property or life estates.

Characteristics of Households

Household characteristics varied substantially from county to county, but the distinctions between the southern and other counties were not quite as sharp as with the characteristics of the places. The average size of household varied from a high of 3.6 persons in McDowell county to 2.5 in Hardy County. Most of the other counties were close to the nine-county average of 2.85 persons per household. The age distributions were similar in most counties except that there was a higher proportion of persons less than 18 years of age in McDowell County and a lower proportion over 65 in Raleigh County. A majority of the residents of the survey households were born in the county where they now live and the majority of the remainder were born elsewhere in West Virginia. An exception was Jefferson County where only 42 percent were born in the county while 40 percent were born outside of the State. The other panhandle counties (Hardy and Marshall) also had somewhat higher portions born outside the State than did the non-panhandle counties. The typical household in all areas consisted of "central families" (husband, wife, and children or husband and wife). Single-person households and mother and children

households tended to be slightly more common in the southern counties as well as in Webster County.

Sources of income, occupations, and educational levels varied considerably with a north-south pattern fairly common. Income from the sale of farm products was more common from the places in the panhandle and central counties (except for Webster) than in the more southern counties. Slightly more households received social security and other retirement incomes in Lincoln, McDowell, and Webster counties than in the other six counties. Coal mining was a major source of income for respondent families in Upshur, Webster, Raleigh, and McDowell counties, but not elsewhere, although there is substantial mining in Marshall County and large coal reserves in Lincoln County. Relatively few households reported receiving food stamps or welfare payments as sources of income, although several reported these as income sources in Lincoln, McDowell, and Webster counties. Incomes tended to be highest in Jefferson County, followed by McDowell and Raleigh. People in Jefferson tend to be more highly educated and many may work in the Washington area, while coal mining and related work probably accounts for the higher earnings in Raleigh and McDowell counties. Families in Webster and Lincoln counties tended to have lower incomes. This is probably partly due to location, poor transportation facilities, poorer resource endowments, and, consequently, fewer employment opportunities.

There were substantially more persons with less than a complete high school education in the southern counties than in the other counties. This varied from 203 persons in McDowell and 198 in Webster to only 38 persons in Jefferson County. Lincoln, Raleigh, and Upshur counties also had substantial numbers of adults who had not completed high school. The number with college training was highest in Jefferson County, probably because of a large number of in-migrants (perhaps from the Washington, D.C. area).

Production Activities

The most common production activity on respondents' places was growing vegetables for home use. This was true for almost one-half of the households in Lincoln County and nearly 80 percent in McDowell. Relatively few households reported producing any products for sale but the more farm-oriented counties, Jefferson and Hardy, followed by Doddridge, Upshur, and Marshall, did have substantial numbers who produced and sold farm products. Beef cattle and dairy products were the most common items produced for sale although poultry, eggs, sheep, corn, fruit, and several other minor crops and livestock were produced and sold by some of the households. A considerable number of respondents in Lincoln County produced and sold tobacco. Many respondents harvested firewood but relatively few sold it.

Migration Variables

An average of 25 percent of the interviewees stated that they had never moved, but this varied from 1.7 percent in Webster County to 53.4 percent in Hardy. There was no apparent north/south pattern among the nine counties with respect to the time when the last move was made. Those who had moved within the last five years varied from 10 percent in McDowell County to 29.9 percent in Webster, while those who moved between five and ten years ago varied from 5.8 percent in Hardy County to 21 percent in Jefferson.

Most respondents had made their last move from another location within the county of current residence, ranging from 42 percent in Doddridge to 76 percent in McDowell County. About equal numbers had moved from elsewhere in the State or from outside the State. McDowell (2.8 percent) and Jefferson (6 percent) had lower proportions who had moved from within the State. Jefferson had the largest proportion who had moved from outside the State, 31 percent, while Hardy, McDowell, and Webster each had about 21 percent.

Overall, about equal numbers, 35 and 33 percent respectively, had moved from rural non-farm areas and small towns while about 23 percent had moved from farms and 10 percent from urban areas. However, nearly 60 percent of those moving in Marshall County reported having moved from farms while only 2 percent in Raleigh County moved from farms. No one reported having moved from an urban area in Marshall County, but 17.5 and 16.0 reported doing so in Doddridge and Jefferson counties, respectively. Typically, relatively few respondents reported moving from farms in the southern counties, while relatively more had moved from urban areas in the Eastern Panhandle areas.

The more important reasons cited for moving included to change lifestyles, a preference for rural living, followed by a dislike of the previous place, and to obtain employment. Persons from the southern (Raleigh and McDowell) and central counties (Upshur and Webster) were more apt to cite changing lifestyles and dislike of the previous place of residence, whereas those from Jefferson, Lincoln, and Marshall more frequently cited a preference for rural living. Many had moved for various other reasons—marriage, retirement, etc.

Nearly two-thirds of those who had moved reported no change in their incomes as a result of moving and 18 percent reported increases and 15 percent decreases. Relatively more of those who had moved in Doddridge, Hardy, Marshall, or Upshur counties reported no changes in their incomes. More movers from Hardy, Upshur, and Webster reported decreases than increases. The average size of increase was \$3,276 and the average decrease \$5,241. Several of the income decreases were reported by people who moved to the county after retirement.

Commuting

More than 600 of the households reported having one or more members who worked off the place, either full or part time. There were 169 households where two or more persons commuted to work (Appendix Table VI). The average one-way distance traveled to work was about 17 miles, with a range of 0.2 to more than 100 miles. The county averages ranged from a high of 25.4 miles in Doddridge to a low of 11.7 in Hardy. About 85 percent of those who indicated the mode of transportation used private autos to get to work. Nearly 10 percent were in car pools, with most of these located in Jefferson and Webster counties. Only six persons were reported as using some form of public transportation.

Three-fourths of the interviewees who commuted to work indicated that they commuted five times per week and one-tenth said they commuted six times per week. A few commuted only one to four times per week and another small group worked seven days per week. There were more people commuting less than five days in Webster than in any of the other eight counties. Relatively fewer total persons were reported as commuting in Upshur County.

Community Problems

Interviewees were asked to indicate the three most important problems in their communities. A large number of different problems were listed—697 listed at least one problem, 498 at least two, and 317 listed three problems. The most listed problems were roads, a lack of community activities, a lack of services, a lack of employment opportunities, poor public utilities, and inadequate law enforcement. Law enforcement had several related problems which, if combined, would raise the responses to that problem considerably—problems such as vandalism, theft and drugs. Housing, stray dogs, pollution, welfare, land prices, and excessive development were all mentioned more than twenty times each, but few other problems were mentioned as many as ten times.

Roads were the most commonly mentioned problem in all but Doddridge, Hardy and Lincoln counties. Some other problems frequently mentioned in particular counties were public services in Marshall and McDowell, employment opportunities in Upshur and McDowell, a lack of community facilities in Doddridge and Hardy, and public utilities in Raleigh County.

Respondents also were asked about farm production and marketing problems, but relatively few indicated that they had such problems. Some stated that prices were too low and a few cited transportation as a marketing problem. The more frequently mentioned production problems were insects, weather, and labor. These were more apt to be cited by residents of the more agriculturally oriented counties such as Hardy and Jefferson.

Information and Credit

Many households in the survey indicated that they obtained information from several sources, the most common being the Cooperative Extension Service, followed by Soil Conservation Service, State Department of Agriculture, Farmers Home Administration, and Agricultural Stabilization and Conservation Service.

The most notable feature of the results when evaluated by county was the much greater use of most information sources, and especially the agricultural information, by the rural residents of Jefferson County. That county had the most highly educated group of rural residents, is the most productive agricultural county of the nine, and had the greatest proportion of rural residents who had moved from out-of-state. Upshur followed in the number of respondents who utilized the information sources listed. Fewer McDowell County residents used the information of the agencies listed, while there were relatively few differences in the other counties.

Services Satisfaction

The county and area where the respondents lived appeared to have a very strong influence on the general level of satisfaction with services. Residents of the southern (primarily coal) counties, except for Raleigh, tended to be less satisfied than those in other parts of the State. Surveyed residents in McDowell County were, on the average, the least satisfied, followed by those in Webster and Lincoln counties. McDowell County respondents were least satisfied with 18 of the 26 services, and those from Webster were least satisfied for the other eight services covered by the survey. Raleigh County, the one exception in the southern part of the State, is the trade center of the coal fields and has had considerably more industrial development than the other counties in that area.

The relatively more satisfied respondents tended to be located in the Northern and Eastern Panhandle counties. Respondents in Doddridge County also were relatively satisfied (or less dissatisfied for those services where dissatisfaction was the more prevalent response). In general, counties with higher average levels of satisfaction were those with higher average incomes and with better, less rough terrains. While the levels of satisfaction were different, it should be noted that there was a fairly general agreement between counties in the way the individual services were rated in relation to each other. Thus, persons in all areas tended to be relatively dissatisfied with road maintenance, but generally were more satisfied with emergency medical and library services.

Socio-Economic Factors

Income, education, occupation, family situation, and background are among the socio-economic factors that might influence the characteristics or attitudes of the respondents or result in variations in the types of places where they live or uses they make of their property. The impacts of these factors on the characteristics of the rural residents included in the survey are analyzed in the following sections.

Characteristics of Places

Parcel size and use tended to vary with income and education. In general, larger acreages were associated with higher incomes and more years of education. Those with incomes of more than \$50,000 had an average of 293 acres and those with incomes between \$30,000 and \$50,000 averaged 114 acres. Those with incomes of less than \$5,000 had places that averaged 36.5 acres and those with incomes of \$5,000 to \$10,000 averaged 41.8 acres. Similarly, persons with post-graduate college work had an average of 123.5 acres while those with other college training averaged 111.1 acres. Persons with a grade school or less education lived on places with an average of 22.4 acres while places of those with some high school averaged only 18.4 acres. Persons who were high school graduates had an average of 78.5 acres. Use tended to vary with size. Larger-sized parcels tended to be used as farms, although many persons with relatively large acreages produced no farm products. Thus, although 253 persons considered their places to be farms, only 134 of these used their land for farm production activities—either on a full- or part-time basis.

Household composition and household size also were related to the characteristics of the places. Composition categories consisted of single person households, husband and wife, husband, wife and children, mother and children, and other combinations. Household composition and household size were related due to the definition of composition. Smaller households tended to be associated with smaller parcels that were used primarily as residences. Use of the parcels as full- or part-time farms tended to increase with household size, although 75 percent or more of the parcels were used primarily as residences for all household sizes.

Single person households tended to have smaller places (an average of 37.6 acres), but the smallest average parcel size was for mother and children (29 acres). The largest average size was for "other" household composition (113.8 acres), husband and wife combinations averaged 70.6 acres, and husband, wife and children households averaged 62.3 acres each.

Household Characteristics

Lower incomes and educational levels tended to be associated with single person households. Females accounted for two-thirds of the single person households and these tended to have lower incomes—more than one-half of the single females had incomes of less than \$5,000. The majority of these were relatively elderly. Higher incomes tended to be associated with increased family size, that is, higher proportions of the larger families were in groups with higher incomes. There were 44 percent of the households with three or more family members which had incomes of more than \$20,000. In contrast, 47 percent of the one person households had incomes of less than \$5,000 and another 23 percent had incomes between \$5,000 and \$10,000. Two person households also tended to be in the three lower income categories (under \$20,000), but only 33 percent of these households had incomes of less than \$10,000. Many persons in both of these groups consist of elderly persons who are retired. Thus, households composed of single persons and husband-wife combinations tend to be in the lower income categories. Husband-wife-children household compositions tended to have relatively high proportions in the three higher income groups—those over \$20,000. The majority of the husband-wife-children households, 56 percent, had incomes between \$20,000 and \$50,000. Mother-child households tended to be in the lower income groups; 54 percent of them had incomes of less than \$10,000 and 30 percent were in the less than \$5,000 income group.

Services Satisfaction

Socio-economic factors appear to have considerable influence on levels of satisfaction with services. Among the factors tested for relationship to satisfaction were income, education, occupation, household composition, and background of the persons. The analysis indicated that the relationships generally were not linear, with both the lowest and highest income categories tending to be more satisfied than the intermediate groups. The means of the scores for respondents in the under \$5,000 income group and the over \$50,000 group were both at the lower end of the scale for 15 of the 26 services and one or the other were at the lower end for 10 out of the 11 remaining services.

Household size and composition were factors affecting satisfaction with services. There were significant differences in satisfaction for family size (1, 2, 3, 4, 5 or more) for 18 of the 26 services. Satisfaction generally decreased as household size increased. Single person households were the most satisfied for 11 of the services, while those with 5 or more persons in the household were the least satisfied for 20 of the services. There was a tendency, although somewhat less pronounced than for size, for respondents from households without children to be more satisfied than for those with children, whether it was a single person household or a husband and wife household. For those households with children, the level of satisfaction appeared to vary little whether the household was father, mother, and children or mother and children. Other types of households were not prevalent enough to use in the analysis.

The other socio-economic factors considered in the analysis—education, occupation and place of birth—were not found to be strongly related to the level of satisfaction.

Migration Relationships

The variables used to evaluate migration were time when moved, size or type of place moved from, and reason for moving. With rural populations increasing, due in part to in-migration, the characteristics of those who are moving into an area may become increasingly important, especially if they are different than persons already residing in the area. This analysis suggests that those who said they had never moved tend to have a substantially distinct set of characteristics. Typically, this group lived on and owned more land, were more apt to be farming, tended to have somewhat lower incomes, and had smaller households (one and two person). They also tended to be older and were more likely to be retired.

Characteristics of Places

People who had moved lived on smaller places and the more recently they had moved the smaller was the average size of parcel where they resided. There were relatively few differences whether they had moved from within the county, from elsewhere in the State, or from outside the State. However, those who had moved from farms tended to live on larger-sized places. About one-fourth of those who had never moved used their places as farms while only 8 percent of those who had moved less than five years ago and 14 percent of those who had moved more than five years ago did so. However, larger proportions of all groups considered their places to be farms although producing little or no farm products. Those moving from farms as well as those who had never moved were more likely to be engaged in some type of farming activity and, while the numbers were not large, those from urban areas were more apt to be farming than persons from small towns or rural non-farm areas.

Household Characteristics

Slightly larger proportions of those who had moved more than ten years ago and of those who had never moved were in the lower income categories while those who had moved in the last five years had relative concentrations in both the lower and higher income groups. Those who had moved between five and ten years ago tended to be more concentrated in the middle income groups. There was no systematic relationship between education level and time when moved.

Geographic area moved from (within county, elsewhere within State, and out-of-state) were not closely related to income or education, but they were to household size, household composition, and type of place moved from. Household sizes were somewhat smaller for those who had not moved and more were single person or husband-wife compositions. Of those who had moved from out-of-state a substantial proportion (71.4 percent) were from urban areas. A relatively larger proportion of those who had moved within the last five years also were from out-of-state. About 18.6 percent of the respondents had moved during the last five years, but 30 percent of those who had moved from out-of-state did so in that time period.

The type of place moved from was closely related to income and education. People from farms tended to have fewer years of formal education and to be in the lower income groups while the opposite existed for persons from urban areas. Those from rural non-farm areas and small towns were in intermediate groups, but those from small towns were, on the average, somewhat better

educated and in higher income groups. The majority of all households that had moved were composed of husband and wife or husband, wife, and children and relatively little difference existed with regard to type of place moved from.

Services Satisfaction

Satisfaction with services was closely related to migration (moving). This was examined by use of four variables—time when moved, geographic area moved from, reasons for moving, and type of place moved from. All were related to the satisfaction but with the geographic area moved from (within county, within State, and outside of State) being less closely related. About one-fourth of the respondents said that they had "never moved." This group was the most satisfied with services. Although there was relatively little difference in satisfaction levels for the three groups that had moved, the analysis indicates the level of satisfaction tended to increase with the length of time since the last move.

The type of places moved from were categorized as farm, rural residence, small town, and urban. Those who had moved from farms tended to be the most satisfied, although those who had moved from urban areas also were more satisfied. The least satisfied had moved from rural non-farm residences.

Reasons for moving included to obtain employment, transferred by employer, preference for rural living, to change lifestyles, and dislike for the previous place. There were 22 services for which significant relationships were found. The most satisfied group typically were those that had moved as a result of being transferred, whereas the less satisfied groups tended to be those that disliked their previous residence and those that had moved to change lifestyles or to find employment.

Conclusions

Residents of rural areas in the nine counties surveyed are a relatively heterogenous group, as are the places where they live. The vast majority can be classified as rural non-farm residents. Relatively few depend on farming for all or most of their income although farming is an important activity for residents in a few of the counties. Many others produce vegetables, fruit, livestock, wood, and other products for home use. Many consider their places to be farms even though they produce no agricultural products for sale.

A substantial majority of the rural residents in all the counties (except for Jefferson) were born in the county where they now reside. Those who moved into the county tended to have been from outside the State. The rate of in-migration by those from out-of-state seems to have become more common in the last ten years before the survey, and especially so during the last five years.

The rural residents contacted in the survey represent a broad cross section with respect to their socio-economic characteristics. Housewives, students (mostly children), and retired persons accounted for a relatively large proportion of the household members, with the remainder in many different occupations of which no group was dominant. Although low household incomes were reported fairly frequently, intermediate income levels were more typical of the rural households included in the survey and a substantial number reported relatively high incomes. Educational levels among adults varied

considerably, but there was a disproportionate number of persons with less than a complete high school education. Those with fewer years of formal schooling tended to be in the older age groups.

Several characteristics tended to vary with the location. Some notable variations were between the southern counties and those in other parts of the State. Webster County, which is in the central area, however, was more similar to the southern counties. Most of the southern counties are characterized by very rough terrain, that is, a large proportion of their land consists of steeply sloping hills with narrow valleys and ridges. Coal production is a major economic activity in all the southern counties (except for Lincoln) as well as in Webster and Upshur counties. They are adjacent counties, but vary substantially in the characteristics of their communities, residences, and individuals.

Counties in the southern area, including Webster, tended to have much smaller average sizes of places, relatively few farms, produced fewer farm products, and had higher proportions of persons with less than a high school education. Their residents also tended to be less satisfied with the quality of public services than did persons in other areas of the State.

Income, education, and household composition were important socio-economic factors that were related to other characteristics or attitudes of the persons interviewed. Persons with higher incomes and more years of schooling tended to own more land. Lower income groups tended to be single person or two person (husband and wife) households who also were less formally educated. Generally, both those with higher and lower incomes were more satisfied with public services than those in intermediate income groups.

People who moved appeared to be different with respect to a number of characteristics. Those who had not moved were somewhat older, had more land, and tended to have higher incomes. They also were more satisfied with public services than those who had moved. Similarly, those who had moved more recently were less satisfied with services than those who had moved earlier, although the differences were not as striking as in the case of the movers vs. nonmovers. Those who had moved from small towns or non-farm rural residences typically were less satisfied than those who had moved from farms or larger urban areas.

Table I.
Characteristics of Places of the West Virginia Rural Residents in Survey, 1981.

	Doddridge	Hardy	Jefferson	Lincoln	Marshall	McDowell	Raleigh	Upshur	Webster	All Counties
Type of Place (%)										
Farm	50.5	48.5	46.4	31.7	28.8	2.7	4.1	37.6	1.7	26.1
Rural Non-Farm Residence	29.7	34.0	39.2	5.0	35.6	54.9	4.1	35.6	62.4	36.1
Other	—	—	—	—	—	—	1.0	—	0.9	4.2
In Rural Subdivision	19.8	17.5	6.2	38.6	31.7	42.3	5.1	26.7	35.0	33.6
Rural Community	—	—	8.2	24.8	3.9	—	85.6	—	—	—
Primary Use of Place (%)										
Full-Time Farm	3.0	4.8	19.2	1.0	1.9	—	—	1.0	—	3.1
Some Off-Farm Income	4.0	10.7	7.1	5.9	6.5	—	2.0	10.0	0.9	4.9
Part-Time Farm	16.8	10.7	8.1	5.9	5.6	1.8	2.0	7.9	0.9	6.2
Non-Farm Business	—	1.0	1.0	1.0	0.9	3.6	1.0	3.9	1.7	1.5
Residence	74.2	70.9	61.6	83.3	84.1	93.8	94.0	72.5	96.6	82.5
Other	2.0	1.9	3.0	2.9	0.9	0.9	1.0	4.9	—	1.8
Size of Place										
Number Reporting (No.)	86	82	98	91	95	101	99	98	117	867
Average (Acre)	118.9	181.9	165.0	25.2	46.2	23.9	8	37.1	22.9	63.3
Maximum (Acre)	1800	1600	2000	638	810	1700	220	600	310	2000
Minimum (Acre)	0.1	0.3	0.5	0.2	0.3	0.1	0.3	0.5	1.0	0.1
Value of Place										
Number Reporting (No.)	45	37	68	44	53	88	40	43	58	476
Average Value (\$)	64088	85405	206500	44170	75821	23854	63487	64795	36081	73114
Maximum Value (\$)	150000	600000	999999	156000	500000	150000	150000	350000	150000	999999
Minimum Value (\$)	20000	2000	3000	4500	10000	500	18000	4200	1000	500
Source of Heating (No.)										
Coal	4	12	—	3	12	76	19	13	67	206
Electric	7	13	28	14	29	20	34	30	26	201
Wood	30	57	54	17	41	30	33	34	69	365
Oil	0	21	55	1	14	34	10	5	22	162
Gas	89	44	—	82	52	3	47	67	7	391
Solar	0	—	—	—	—	0	1	0	—	1
Other	1	—	—	—	—	—	—	—	—	1

Table II.
Household Characteristics of West Virginia Rural Residents in Survey,
1981

	Doddridge	Hardy	Jefferson	Lincoln	Marshall	McDowell	Halegh	Upshur	Webster	All Counties
Type of Household	percent									
Single Person	12.8	10.7	11.7	11.0	15.4	7.0	9.0	14.2	14.2	12.4
Husband and Wife	28.7	47.0	37.4	35.0	26.9	18.3	39.0	26.5	35.9	31.7
Husband, Wife & Children	42.6	34.3	47.4	30.0	46.2	52.2	32.0	46.9	35.0	41.8
Mother and Children	10.9	7.8	11.6	14.0	11.5	22.6	15.0	12.2	16.2	13.8
Ages (Male)	number of persons									
Less Than 18	41	15	36	32	37	110	20	37	40	368
18-29	31	21	19	21	28	30	30	32	38	250
30-49	33	29	45	37	33	43	29	24	34	307
50-64	21	33	29	11	24	37	36	20	40	253
65+	24	26	24	26	28	18	16	30	27	219
Totals	150	124	153	129	150	238	131	143	179	1397
Percentages (%)	51	47	48	49	50	55	49	46	53	50
Ages (Female)	number of persons									
Less Than 18	41	28	48	25	37	79	22	35	50	365
18-29	22	22	29	21	24	36	19	29	27	229
30-49	31	15	37	39	32	45	33	33	33	318
50-64	16	21	28	22	24	22	43	38	19	233
65+	11	32	24	26	32	13	19	32	30	239
Totals	141	138	166	133	149	195	136	167	159	1484
Percentages (%)	49	53	52	51	50	45	51	54	47	50
Where Born	number of persons									
In County	112	138	108	121	145	224	155	141	162	1308
WV Elsewhere	76	51	43	73	55	25	60	55	73	511
US Not WV	21	52	104	10	23	55	28	17	30	346
Foreign			1			2	1	1		5

Table II (cont.)

	Doddridge	Hardy	Jefferson	Lincoln	Marshall	McDowell	Raleigh	Upshur	Webster	All Counties
	-----number of persons-----									
Where Raised										
Farm	—	128	—	124	75	67	—	—	—	394
Rural Non-Farm	45	64	57	45	76	140	146	39	81	693
Small Town	37	21	50	23	53	51	36	46	15	332
Urban	8	4	27	10	17	4	6	9	8	93
Other	2	—	—	8	—	—	7	—	—	17
Income Range:										
Less Than 5,000 (\$)	21	16	18	11	9	15	3	15	21	129
5,000-9,999	12	18	10	29	13	20	10	16	28	156
10,000-19,999	33	27	18	33	20	35	34	37	36	273
20,000-29,999	14	13	18	15	21	29	18	17	20	165
30,000-49,999	2	5	12	5	3	11	14	2	7	61
50,000 +	—	—	15	1	0	1	1	1	3	22
Not Known	—	5	5	5	5	—	3	2	1	26
Refused	16	16	3	2	31	4	6	12	1	91
Source of Income:										
Sale of Products	24	28	29	9	14	1	1	20	6	132
Sale of Services	1	—	1	—	2	1	1	1	2	9
Social Security	42	38	35	50	39	42	32	37	58	373
Military Retirement	9	6	3	4	5	4	7	6	8	52
Other Retirement	11	16	23	34	15	30	25	15	48	217
Investments	27	27	25	27	29	1	1	21	6	164
Part-Time Employment	7	19	24	6	17	18	6	16	14	127
Full-Time Employment	59	54	59	43	66	46	65	55	55	502
Food Stamps	5	5	—	12	3	11	1	3	11	51
Welfare	1	1	—	1	—	9	—	4	4	20
Coal, etc. Leases	7	10	—	4	9	1	1	16	7	55
Coal, etc. Royalties	12	1	—	8	2	—	1	11	2	37
Other	7	—	—	7	—	6	3	3	3	29

	Doddridge	Hardy	Jefferson	Lincoln	Marshall	McDowell	Raleigh	Upshur	Webster	All Counties
	-----number of persons-----									
Occupation:										
Professional	15	10	37	3	7	6	19	7	8	112
Business	4	3	--	3	2	3	8	7	3	33
Management	5	6	--	1	3	1	9	6	5	36
White Collar	13	12	33	8	9	5	6	9	5	100
Service	5	13	--	5	8	5	12	18	16	82
Skilled Trade	10	--	15	11	16	5	16	11	11	95
Other Blue Collar	7	17	5	5	7	1	3	11	14	70
Government Worker	4	--	--	2	1	3	1	3	7	21
Farmer	15	28	30	3	7	1	3	16	4	107
Housewife	70	66	26	79	17	59	49	66	76	508
Student	43	25	8	75	31	59	23	16	61	341
Retired	32	34	40	40	17	33	43	25	26	290
Coal Miner	--	--	--	--	--	47	24	11	19	101
Unemployed	24	6	3	26	6	15	8	7	28	123
Other	21	10	5	38	10	20	9	10	28	151
Education:										
Doctoral Degree	1	--	3	--	3	--	--	2	--	9
Masters Degree	1	3	13	4	4	--	3	2	2	32
Bachelors Degree	17	16	40	8	21	1	18	18	7	146
Some College	15	19	27	8	24	7	21	18	18	157
High School Diploma	109	102	91	62	100	50	80	80	64	738
Some High School	27	38	15	26	34	105	49	57	46	397
Grade School	21	20	23	70	21	98	31	38	112	434
Vocational	14	22	--	30	25	7	6	9	7	120
In School:										
Grade School	26	18	34	48	31	94	13	25	41	330
High School	21	12	27	27	22	56	21	26	29	241
College	8	4	9	3	1	8	12	5	5	55
Other	--	--	2	1	1	6	1	--	--	11

Table III.
Production Activities of West Virginia Rural Residents in Survey, 1981.

	Doddridge	Hardy	Jefferson	Lincoln	Marshall	McDowell	Raleigh	Upshur	Webster	All Counties
Production Activities:	-----percent-----									
Vegetables	47.9	39.0	53.0	58.1	36.1	17.8	56.0	44.0	42.5	43.1
Fruits	28.7	35.0	42.0	54.6	45.3	20.8	37.0	31.7	20.8	35.6
Milk	93.1	88.3	86.0	—	73.0	20.0	—	78.5	65.0	81.3
Eggs	95.5	90.0	99.0	80.0	84.7	51.4	100.0	100.0	77.1	84.4
Meat	73.7	59.6	76.0	49.0	60.3	42.3	83.0	76.7	41.3	61.1
Fish	48.3	53.3	—	25.0	—	—	—	50.0	—	47.6
Game	60.3	74.0	—	86.8	70.0	—	—	100.0	3.0	60.6
Wood	83.9	94.5	82.0	67.0	97.4	63.9	100.0	87.0	76.9	84.2
Coal	—	100.0	—	—	—	100.0	—	—	100.0	100.0
Gas	100.0	100.0	—	100.0	100.0	—	—	—	—	97.5
Other*	—	1.0	—	—	—	—	—	91.7	—	50.5
Marketing of Products:	-----number of persons-----									
On Contracts	5	1	3	2	—	—	3	5	1	20
Farm Pickup Dairies	11	2	9	—	4	—	—	1	—	27
Pick Your Own	—	—	1	—	—	—	—	2	—	3
Direct	1	1	9	—	—	—	—	3	—	14
Retail	—	—	1	—	—	—	—	2	1	4
Auction	21	20	20	3	6	—	1	7	1	79
Door to Door	—	1	—	—	1	—	1	—	1	4
Wholesale	—	—	1	—	—	—	—	—	—	1
Cooperative	1	8	7	—	5	—	1	10	—	32
Other	7	5	—	4	1	—	1	6	—	24
Plan Changes:										
Yes	12	7	22	13	20	18	15	17	39	163
No	89	95	64	87	96	88	79	84	78	760
Changes Planned:										
To Obtain Employment	6	2	4	7	10	14	10	10	33	96
Retire	2	5	2	3	2	2	5	2	6	29
Expand Farm	2	—	1	1	—	2	2	—	—	8
Other	2	—	—	—	1	—	1	2	—	6
Reduce Farming	—	—	—	—	1	—	—	—	—	1

*de up of other activities, other agricultural products, other recreational activities, camp sites, hunting rights, fishing rights, and ornamentals.

Table IV.
Migration Data for West Virginia Rural Residents in Survey, 1981.

	Doddridge	Hardy	Jefferson	Lincoln	Marshall	McDowell	Rateigh	Upshur	Webster	All Counties
When Moved:	-----percent-----									
Less than 5 years	16.8	12.6	23.0	27.5	13.1	10.3	14.1	21.6	29.9	18.9
5-10 years	13.7	5.8	21.0	18.6	12.2	14.5	19.2	17.6	11.9	14.7
10 + years	25.7	28.1	47.0	48.0	25.2	36.8	60.5	36.3	56.4	41.5
Never moved	43.6	53.4	10.0	5.9	49.5	38.5	6.1	24.5	1.7	24.9
Moved From:										
Another Location in County	42.1	58.3	63.0	63.2	59.2	76.4	70.2	66.7	63.5	64.5
Another Location in W.Va.	43.9	20.8	6.0	24.2	24.1	2.8	20.2	17.9	15.7	17.6
Another Location in U.S.A.	14.0	20.8	31.0	12.6	16.7	20.8	9.6	15.4	20.9	18.0
Type of Area Moved From:										
Farm	33.3	34.8	35.0	35.1	59.3	8.1	2.1	28.6	20.0	22.6
Rural Non-Farm	19.3	19.6	26.0	29.8	24.1	47.3	61.7	31.2	42.6	34.9
Town	29.8	34.8	24.0	25.5	16.6	36.5	30.9	32.5	33.0	32.6
Urban	17.5	10.9	16.0	9.6	—	8.1	5.3	7.8	4.3	9.8
Reason for Moving:	-----number of persons-----									
To Obtain Employment	7	4	4	1	8	11	7	11	13	66
Transferred by Employer	9	2	5	2	2	2	4	4	2	32
Preference for Rural Living	8	9	19	16	16	6	17	12	11	114
To Change Lifestyle	1	7	7	2	9	12	9	29	71	147
Dislike Previous Place	1	4	4	6	3	28	12	11	17	86
Other	1	26	60	75	22	11	43	23	2	263
Change in Incomes:										
Increase	16	11	17	18	16	20	6	14	8	126
Decrease	9	12	7	14	12	1	5	19	14	93
No Change	18	10	55	50	14	53	64	29	93	386
Average Change (\$)	4414.7	4550.0	2533.0	2213.5	3346.0	1081.86	1315.0	4860.60	6440.91	4308.53

Table V.
Average Level of Satisfaction for West Virginia Rural Residents in
Survey, 1981.

	Doddridge	Hardy	Jefferson	Lincoln	Marshall	McDowell	Raleigh	Upshur	Webster	All Counties
Law Enforcement--										
State Police	2.40	2.37	2.19	2.77	2.23	3.00	2.29	2.40	2.55	2.49
Law Enforcement--										
County Sheriff	2.49	2.22	2.50	2.74	2.37	2.93	2.25	2.37	2.72	2.52
Law Enforcement--										
Conservation	2.21	2.13	2.62	2.39	2.28	2.97	2.46	2.51	2.60	2.48
Fire Protection	2.10	1.95	1.38	2.05	2.05	2.78	2.38	2.12	2.34	2.12
Emergency Medical Service	2.00	2.03	1.60	2.04	2.05	2.20	2.11	2.00	2.30	2.04
Public Health Service	2.15	2.26	2.35	2.41	2.11	2.60	2.81	2.26	2.93	2.47
Education--Primary Grades	2.50	2.46	2.29	2.93	2.36	2.45	2.56	2.63	3.29	2.66
Education--Secondary										
Grades	2.65	2.48	2.47	2.91	2.47	2.48	2.72	2.67	3.50	2.75
Education--Vocation Training	2.41	2.21	2.23	2.33	2.28	2.42	2.40	2.20	3.01	2.43
Education--Adult Education	2.59	2.32	2.29	2.68	2.30	2.60	2.56	2.42	2.98	2.56
Water Services	2.59	2.51	2.62	2.66	2.37	3.31	2.32	2.34	3.17	2.73
Sewage Treatment	2.56	2.54	2.69	2.98	2.47	3.53	3.10	2.56	3.31	2.95
Sanitary Landfill	2.38	2.59	2.25	2.85	2.43	3.57	2.68	2.63	3.09	2.76
Garbage Collection Services	2.31	2.16	2.26	2.25	2.12	3.64	2.66	2.44	2.38	2.46
Road Maintenance Services	3.55	4.31	2.92	2.63	4.07	4.43	3.66	4.24	4.26	3.80
Enforcement of Land										
Reclamation	2.75	2.72	3.00	2.81	2.68	3.37	2.79	2.85	3.16	2.92
Public Transport--										
Rural Areas	2.74	2.49	3.26	3.16	3.19	4.82	3.65	3.49	3.37	3.38
Public Transport--										
Between Cities	2.71	2.50	2.88	2.95	2.90	4.76	3.53	3.64	3.59	3.33
Recreation--For Children	2.79	2.69	2.76	3.58	2.60	4.50	3.18	2.97	3.97	3.29
Recreation--For Teenagers	2.93	3.06	3.08	3.72	2.97	4.57	3.35	3.06	4.09	3.49
Recreation--For Adults	2.95	2.95	2.72	3.69	2.84	4.54	3.35	2.89	4.03	3.40
Recreation--For Senior										
Citizens	2.57	2.63	2.48	3.34	2.58	4.48	3.39	2.60	2.95	3.02

Other Services: For former

City/County	2.29	2.46	2.33	1.01	2.38	4.30	1.00	2.35	2.96	2.85
Local Shopping Facilities	2.86	2.81	2.52	2.91	2.31	3.67	2.10	2.29	4.09	2.95
Housing Situation	2.31	2.51	2.85	2.81	2.37	3.53	3.37	2.82	3.92	3.06
Library Services	2.91	1.93	1.85	2.66	2.06	1.10	2.26	2.00	2.47	2.27

Based on rating where: Very Satisfied = 1, Satisfied = 2, Neutral = 3, Dissatisfied = 4, Very Dissatisfied = 5

Table VI.
Methods, Distances, and Frequencies of Commuting by West Virginia
Rural Residents in Survey, 1981

	Dockledge	Hardy	Jefferson	Lincoln	Marshall	McDowell	Raleigh	Upshur	Webster	All Counties
Commuting Method (First Worker)	number of persons									
Personal Automobile	55	52	88	86	59	59	50	49	42	440
Car Pool	1	0	10	5	2	0	5	1	16	50
Public Transportation & Other	1	0	4	6	1	2	2	2	5	35
Commuting Method (Second Worker)	number of persons									
Personal Automobile	12	8	16	10	11	10	18	15	13	113
Car Pool	0	0	5	0	0	0	2	4	6	17
Public Transportation & Other	0	1	2	1	0	0	0	2	2	8
Distance Commuted	miles									
One Way	number of persons									
First Worker	23.1	13.1	20.4	26.0	18.2	16.7	18.5	11.8	14.5	17.9
Second Worker	26.3	6.7	23.6	24.3	12.5	8.0	7.1	11.6	13.0	15.0
Average All Commuters*	23.4	11.7	20.8	25.4	17.4	15.2	15.4	11.8	14.6	17.1
Times Per Week Commuting	number of persons									
Less than Five	4	0	10	4	3	3	2	4	19	49
Five	55	47	60	43	51	51	69	31	52	461
Six	10	11	7	9	13	15	9	10	11	85
Seven	2	3	4	1	1	4	2	1	2	32

*There were up to five persons commuting from a few households

Table VII.
Community Problems Cited by West Virginia Rural Residents in Survey, 1981.

	Doddridge	Hardy	Jefferson	Lincoln	Marshall	McDowell	Raleigh	Upshur	Webster	All Counties
Roads										
First Problem Cited	12	9	6	21	21	32	23	23	21	168
Second Problem Cited	3	1	6	7	12	14	7	4	11	65
Third Problem Cited	<u>2</u>	<u>1</u>	<u>6</u>	<u>3</u>	<u>3</u>	<u>7</u>	<u>6</u>	<u>2</u>	<u>9</u>	<u>39</u>
Total	17	11	18	31	36	53	36	29	41	272
Lack of Community Facilities										
First Problem Cited	15	10	8	13	11	7	8	11	8	91
Second Problem Cited	9	7	4	6	3	10	2	10	14	65
Third Problem Cited	<u>0</u>	<u>2</u>	<u>4</u>	<u>4</u>	<u>1</u>	<u>9</u>	<u>1</u>	<u>4</u>	<u>16</u>	<u>41</u>
Total	24	19	16	23	15	26	11	25	38	197
Law Enforcement										
First Problem Cited	5	3	9	7	3	5	3	3	4	42
Second Problem Cited	0	4	6	11	1	5	7	2	2	38
Third Problem Cited	<u>1</u>	<u>0</u>	<u>3</u>	<u>1</u>	<u>3</u>	<u>6</u>	<u>1</u>	<u>0</u>	<u>2</u>	<u>17</u>
Total	6	7	18	19	7	16	11	5	8	97
Public Utilities										
First Problem Cited	2	4	4	8	2	2	13	1	5	41
Second Problem Cited	1	3	7	8	5	2	15	1	2	44
Third Problem Cited	<u>2</u>	<u>1</u>	<u>2</u>	<u>5</u>	<u>0</u>	<u>1</u>	<u>3</u>	<u>2</u>	<u>1</u>	<u>17</u>
Total	5	8	13	21	7	5	31	4	8	102
Employment Opportunities										
First Problem Cited	8	6	2	0	2	11	0	1	23	53
Second Problem Cited	2	2	2	2	0	7	0	2	14	31
Third Problem Cited	<u>3</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>8</u>	<u>0</u>	<u>1</u>	<u>3</u>	<u>20</u>
Total	13	10	5	3	3	26	0	4	40	104
Public Services										
First Problem Cited	5	9	2	15	12	6	10	6	2	67
Second Problem Cited	1	6	3	12	5	17	7	8	11	70
Third Problem Cited	<u>0</u>	<u>2</u>	<u>3</u>	<u>7</u>	<u>3</u>	<u>15</u>	<u>3</u>	<u>5</u>	<u>12</u>	<u>50</u>
Total	6	17	8	34	20	38	20	19	25	187

Table VIII.
Information Sources and Needs and Credit Sources of West Virginia
Rural Residents in Survey, 1981.

	Doddridge	Hardy	Jefferson	Lincoln	Marshall	McDowell	Raleigh	Upshur	Webster	All Counties
Sources of Information	-----number of persons-----									
State Dept. of Agriculture	6	3	16	8	6	7	10	9	5	70
U.S. Dept. of Agriculture	3	7	17	3	5	6	2	8	0	52
Extension Service	6	10	41	7	11	5	8	15	11	116
Soil Conservation Service	7	6	20	4	10	2	6	13	4	72
Farmers Home Admin.	4	4	4	7	6	12	1	6	2	47
Agr. Cons. & Stab. Svc.	11	3	19	2	2	0	1	6	3	47
College of Agr. & Forestry	0	1	14	2	2	0	2	1	1	23
Division of Nat. Res.	5	0	6	4	1	4	3	11	8	42
State Geological Survey	1	0	3	0	1	0	0	3	2	10
Types of information Needed										
Financial	27	33	18	49	33	31	25	21	32	269
Production	9	11	14	12	9	2	5	5	15	82
Marketing	15	16	13	11	9	3	5	5	8	77
Consumer	27	32	22	37	33	17	40	20	34	262
Family Living	20	21	12	17	20	14	14	21	20	159
Credit Sources										
Banks	74	80	38	49	63	48	36	61	48	497
Production Credit Assoc.	1	3	5	0	1	1	1	0	0	12
Federal Land Bank	1	3	3	1	1	1	0	1	0	11
Farmers Home Admin.	2	4	6	3	3	4	0	4	3	29
Small Business Admin.	0	0	2	0	1	4	0	0	0	7
Savings & Loan Assoc.	4	3	3	6	12	5	0	9	1	43
Merchants	13	9	12	39	14	26	54	11	36	214
Credit Unions	3	6	8	8	9	4	0	2	2	42
Small Loan Companies	6	5	5	8	6	16	9	7	0	62