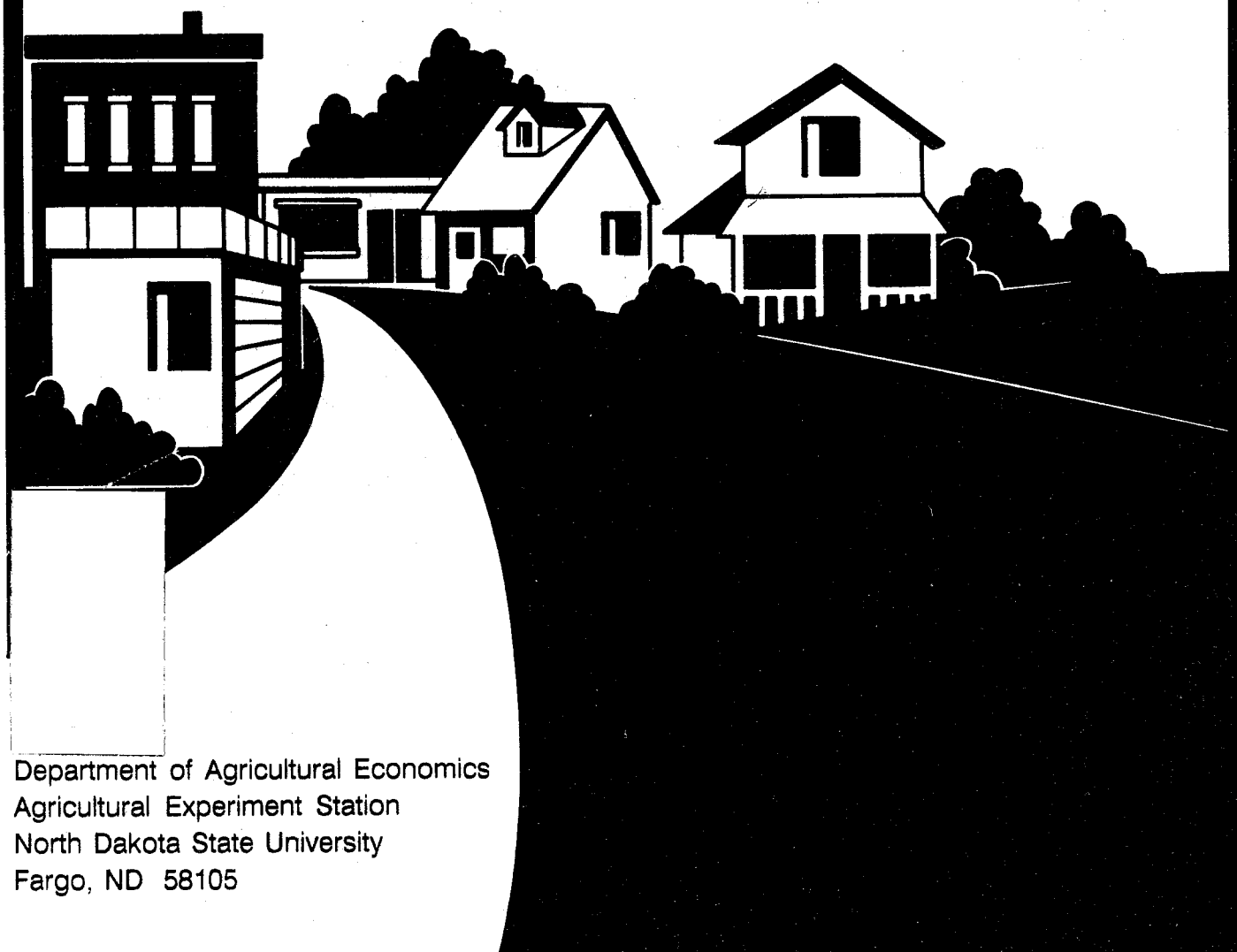


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# SELECTED SOCIOECONOMIC CHARACTERISTICS OF NORTH DAKOTA COMMUNITY RESIDENTS

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## Highlights

The research reported here is part of a major research effort aimed at (1) better understanding the adjustment problems encountered by farm families and rural communities and (2) developing strategies for alleviating these impacts. One objective of the overall study is to analyze the impacts of recent economic stress in agriculture on residents of selected North Dakota communities. Specifically, the following selected characteristics of over 500 community residents are examined: (1) demographic characteristics, (2) employment history and vocational skills and preferences, (3) financial characteristics, (4) trade patterns, and (5) participation in community organizations and activities. The six communities surveyed were Carrington, Casselton, Grafton, Hettinger, Jamestown, and Stanley. Following are highlights and conclusions from the study.

- The average respondent was 40.5 years old, had lived within the county for an average of about 26 years, and had lived in the town for almost 18 years. About one-fourth of the respondents had never lived outside their county, and just over half had never lived outside the state.
- Educational levels of survey respondents reflect the state's tradition of secondary school completion. Only 8.8 percent of the respondents and 10.4 percent of their spouses had not completed high school. More than one-fifth of both respondents and spouses had completed college.
- Most of the survey respondents and their spouses were employed. Men were most often employed in durable goods manufacturing, professional specialties, and retail trade, while the government sector was the largest employer for women.
- Adjusted gross income of respondents' households in 1985 averaged about \$25,700, and 9.5 percent of all households had incomes below the poverty level.
- About 30 percent of respondents and spouses had been employed at their present jobs less than three years. About 18 percent of this subgroup (or one in 20 of the total sample) reported that they were former employees of firms that had closed or made personnel cutbacks. The median family income of these displaced workers was \$20,000 (compared to \$23,000 for the overall sample).
- About 20 percent of men and 16 percent of women responding to the survey indicated that they were likely to look for a different job in 1986, and about 72 percent of these persons would be willing to relocate. Persons who would relocate were generally younger and better educated than average, and most would seek to relocate to one of North Dakota's larger cities.

*In summary, this survey of residents of six agricultural trade centers suggests that secondary effects of current economic stress in agriculture are now being experienced by many rural nonfarm residents. Some of these individuals have experienced job loss as their employers ceased operation or initiated personnel cutbacks, while others are contemplating relocation in hope of finding more satisfactory employment. Thus, one effect of the current economic stress in agriculture may be to stimulate additional migration from the state's rural areas. For rural nonfarm residents, as for farmers and rural business persons, adverse economic trends in agriculture have posed substantial adjustment problems.*



SELECTED SOCIOECONOMIC CHARACTERISTICS OF  
NORTH DAKOTA COMMUNITY RESIDENTS

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A substantial percentage of American farmers are facing the most severe financial conditions since the 1930s. Recent surveys suggest that as many as one-third of the commercial farm operators in some regions may be experiencing substantial economic stress and that many of them may be unable to continue farming if current conditions persist beyond one or two more years (Johnson et al. 1986; Johnson, Baum, and Prescott 1985; Jolly et al. 1985).

The causes, nature, and effects of current economic conditions in American agriculture have been the subject of a rapidly growing body of popular literature and have recently received increased attention in professional circles. A majority of this literature consists of examinations of the extent of financial problems (Reinsel and Joseph 1986; Duncan and Harrington 1985; Leholm et al. 1985; Murdock et al. 1985) or their likely impact on lending institutions (Melichar and Irwin 1985; Barry and Bernard 1985; Todd 1985; Barry and Boehlje 1985). Relatively few analyses have examined the impact of current farm financial conditions on rural communities (Leistritz and Ekstrom 1986; Heffernan and Heffernan 1985; Ginder et al. 1985; Murdock et al. 1986), yet there appears to be reason to believe that these impacts may be substantial, particularly in areas where agriculture accounts for a high percentage of the economic base.

North Dakota, a state where the dependence on agriculture is quite high, offers an opportunity to examine some of the secondary effects of the economic decline in agriculture. Of the state's 53 counties, 39 have been classified as "farming dependent"<sup>1</sup> (Bender et al. 1985) (Figure 1). From 1980 to 1985, taxable retail sales (adjusted for inflation) have declined 18.3 percent in these agriculturally dependent counties, compared to a decrease of 12.5 percent statewide (Appendix Table 1). Similarly, these counties experienced a 10.6 percent decrease in total employment from 1980 to 1985, compared to a statewide increase of about 1 percent (Appendix Table 2). Thus, it appears that business proprietors, residents, and public officials in agriculturally dependent areas may be experiencing substantial adjustment problems as a result of the adverse economic conditions in agriculture. If policies are to be designed to address this situation and to assist communities, as well as farm operators, in adjusting to such problems, information concerning such impacts and adjustments is essential.

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<sup>1</sup>Farming-dependent counties are those in which farming contributed a weighted annual average of 20 percent or more to total labor and proprietor income from 1975 to 1979.

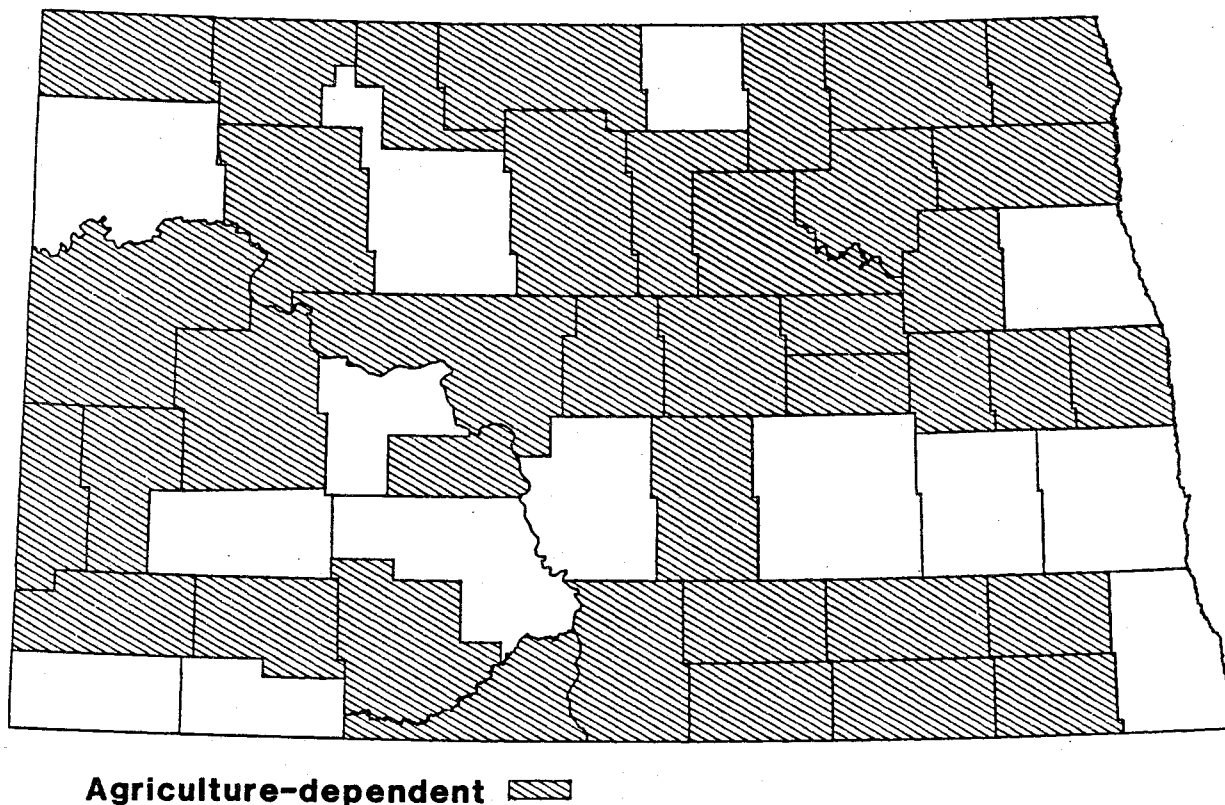


Figure 1. Agriculture-Dependent Counties, North Dakota

SOURCE: Bender et al. 1985.

Although it appears obvious that the farm crisis is having adverse effects on many rural communities, relatively little information is available to address many key issues of concern to community developers and other specialists who need accurate information to effectively design programs aimed at reducing the effects of the crisis on residents of rural areas. Little empirical information is available concerning such key questions as the following. What are the demographic characteristics, employment skills, and financial resources of rural residents? To what extent have businesses in rural communities been affected by the economic situation in agriculture? What do residents of rural communities believe have been the farm crisis' overall effects on their community and its service structure? What do rural community residents believe have been the crisis' effects on their personal lives? What do rural community residents believe are the major causes of the farm crisis?

The research reported here is part of a major research effort aimed at (1) better understanding the adjustment problems encountered by farm

families and rural communities and (2) developing strategies for alleviating these impacts. One objective of the overall study is to analyze the impacts of recent economic stress in agriculture on businesses, public services, and residents of selected North Dakota communities. This report examines one aspect of the larger study. Specifically, the following selected characteristics of residents in six North Dakota communities are examined:

1. Demographic characteristics, such as age, marital status, education, and previous migration patterns.
2. Employment history and vocational skills and preferences.
3. Financial characteristics, such as levels of income, assets, and debts.
4. Trade patterns.
5. Participation in community organizations and activities.

The report first briefly describes study procedures, then examines the specific characteristics outlined above, before drawing conclusions and discussing future implications.

#### Study Procedures

The results reported here were derived from a survey, conducted during the period March through July of 1986, of six North Dakota communities, Carrington, Casselton, Grafton, Hettinger, Jamestown, and Stanley (Figure 2). The communities were selected to represent trade centers of different sizes located in different regions of the state. These communities all are located in heavily agricultural areas. Of the six counties, four had more than 20 percent of their labor force directly employed in agriculture in 1980. (For a more detailed profile of the study communities, see Leistritz et al. 1987.)

In order to study the effects of the farm crisis on these communities, informal interviews were conducted with community leaders to identify the various forms of impacts that had been experienced. Then three formal research instruments (surveys) were developed and administered to three separate groups: current business operators, former business operators, and other community residents. These groups were believed to be experiencing (and perceiving) the crisis differently, and the congruence or lack of congruence among the three groups' evaluations of the crisis was seen as a means of evaluating the extent to which the crisis was having selective versus pervasive impacts in the communities. For all three groups, only persons 18 to 64 years of age, who were not presently operating farms, and who were thus likely to be dependent on the community for income and employment, were interviewed.

The survey of community residents was administered via telephone to a random sample that was screened to also eliminate persons who were

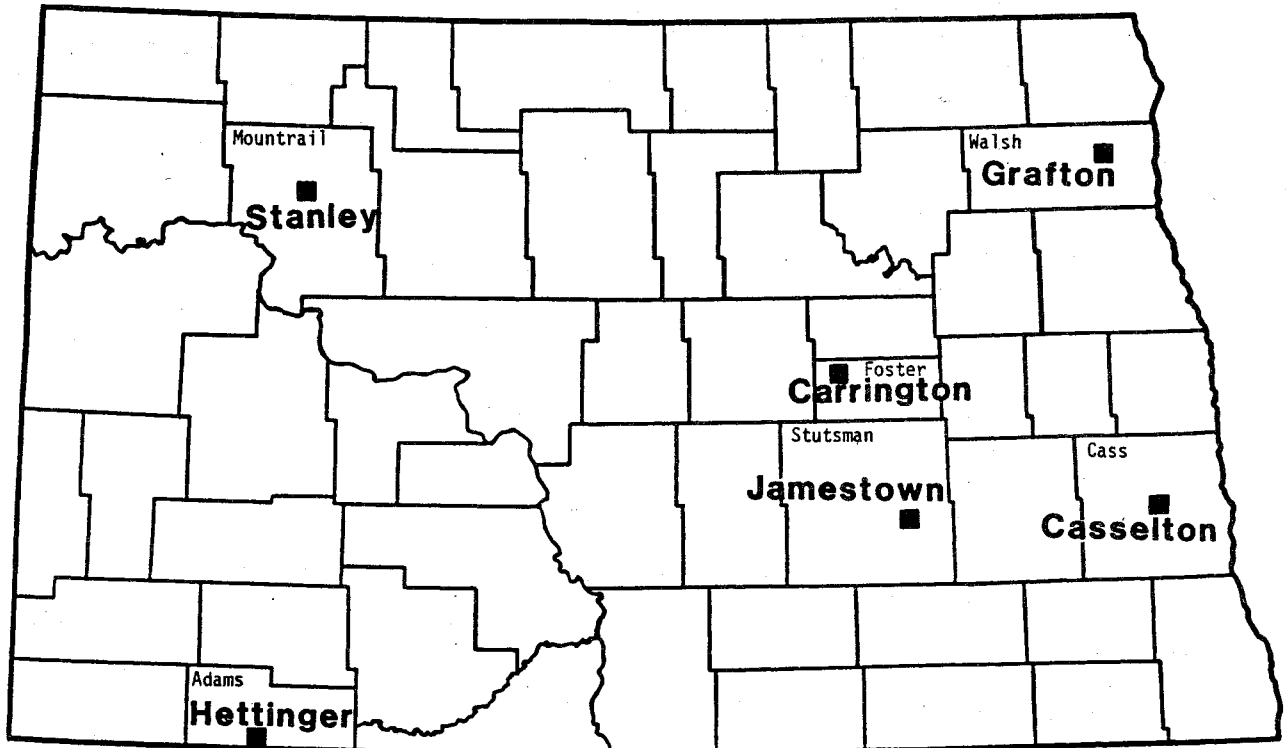


Figure 2. Communities Selected for Analysis

current business operators, former business operators, or current operators of farms. The intent of this survey was to obtain information from persons who were likely to be dependent on nonfarm wage and salary income sources. The sample of residents in each community was sufficiently large to obtain a 95 percent level of confidence that the responses of the sample would be within 10 percent of those from the population as a whole. The refusal rate of those contacted on the phone was 33 percent, so the sample required relatively limited replacement (Table 1).

This report presents a socioeconomic profile of the rural community residents. Companion documents present an analysis of business, financial, and management characteristics of current and former businesses (Leistritz et al. 1987) and compare and contrast their views concerning community satisfaction, community impacts of the farm crisis, and causes and effects of the farm crisis with those of community residents (Agricultural Economics Report No. 219).

#### Socioeconomic Profile of Rural Community Residents

Selected characteristics of community residents who responded to the survey are summarized in this section. The summary is organized into five parts which describe the following characteristics: demographic, employment, financial, trade patterns, and community participation.

TABLE 1. SURVEY SUMMARY, ALL SURVEYS, ALL TOWNS

Category	Carrington	Casselton	Grafton	Hettinger	Jamestown	Stanley	All
<b>Residents</b>							
No. of households 1980 <sup>a</sup>	981	616	1,687	691	5,980	644	10,599
No. of households contacted	198	185	268	177	303	235	1,366
No. disqualified	90	80	99	89	88	132	578
No. refused	28	32	68	17	84	32	261
No. of surveys completed	80	73	101	71	131	71	527
<b>Businesses</b>							
No. contacted <sup>b</sup>	175	96	247	153	300	161	1,132
No. completed	106	38	103	81	154	65	547
<b>Former businesses</b>							
No. contacted	38	6	8	19	39	18	128
No. completed	29	1	2	8	19	9	68

<sup>a</sup>SOURCE: U.S. Bureau of the Census 1982.

<sup>b</sup>An attempt was made to contact all known businesses in all towns except Jamestown where a sample was drawn.

### Demographic Characteristics

Selected demographic characteristics of survey respondents in each community are summarized in Table 2. The average age of respondents was 40.5 years, 53.5 percent were female, and more than 99 percent were white. About 70 percent were married, 15 percent were single, 9 percent were separated or divorced, and about 6 percent were widowed. Most of these characteristics were similar among towns, although Casselton had a much higher than average percentage of male respondents (Jamestown had the highest percentage of females). Grafton had the highest percentage of single persons (20 percent). (Comparable information from the 1980 Census of Population is summarized in Appendix Table 3.)

The average age of the spouse was quite similar to that of the respondent (Table 2). Household size averaged 2.9 persons with little variation among towns. The number of children under age 19 in these households averaged 1.2, again showing little variation among towns. The respondents had lived in their present communities almost 18 years, and more than one-fourth of the group had never lived outside their home county for more than one year. Just over half of the respondents had never lived outside the state.

About 23 percent of the respondents and 21 percent of their spouses had completed college, and another 32 percent of each group had attended college or some postsecondary school. Only 8.8 percent of respondents and 10.4 percent of spouses had not completed high school.

TABLE 2. SELECTED DEMOGRAPHIC CHARACTERISTICS OF COMMUNITY RESIDENTS AND SPOUSES, BY TOWN

Item	Units	Carrington	Casselton	Grafton	Hettinger	Jamestown	Stanley	All
Respondent age:								
Average age	Years	39.2	45.2	38.6	41.1	40.1	40.0	40.5
Distribution:								
Less than 25	Percent	13.8	5.6	12.0	7.0	6.4	11.2	9.2
25 to 34	Percent	28.7	15.1	30.3	30.8	28.8	30.8	28.9
35 to 44	Percent	26.3	27.3	26.2	23.8	31.1	21.0	25.4
45 to 54	Percent	12.5	24.7	14.0	16.8	15.6	21.0	16.9
55 to 64	Percent	18.7	28.8	17.0	21.0	18.7	15.4	19.7
Respondent sex:								
Male	Percent	45.0	63.0	44.6	47.9	39.7	45.1	46.5
Female	Percent	55.0	37.0	55.4	52.1	60.3	54.9	53.5
Respondent race:								
White	Percent	98.8	100.0	98.0	100.0	100.0	98.6	99.2
Other	Percent	1.3	0.0	2.0	0.0	0.0	1.4	0.8
Ethnic background:								
German	Percent	45.5	41.1	18.8	30.4	39.7	24.6	33.5
German Russian	Percent	1.3	1.4	2.0	10.1	4.6	4.3	3.8
Norwegian	Percent	24.7	31.5	25.7	31.9	19.8	34.8	26.9
Other Scandinavian	Percent	7.8	6.8	5.9	11.6	7.6	8.7	7.9
British Isles	Percent	9.1	8.2	10.9	7.2	9.9	7.2	9.0
Other	Percent	11.7	11.1	36.8	8.5	17.7	20.1	18.2
Marital status:								
Single	Percent	15.0	13.7	20.0	14.1	13.0	15.5	15.2
Married	Percent	75.0	75.3	66.0	66.2	71.8	63.4	69.8
Separated or divorced	Percent	2.5	6.8	12.0	12.7	10.7	8.5	9.1
Widowed	Percent	7.5	4.1	2.0	7.0	4.6	12.7	5.9
Spouse age:								
Average age	Years	39.5	45.5	41.3	39.8	40.1	37.8	40.7
Household size:								
Average	Number	3.1	2.9	2.8	2.8	3.0	3.0	2.9
Distribution:								
One	Percent	20.0	13.9	24.8	22.5	16.0	19.7	19.4
Two	Percent	21.3	36.1	23.8	25.4	24.4	26.8	25.9
Three	Percent	15.0	15.3	17.8	7.0	20.6	12.7	15.6
Four	Percent	23.8	22.2	21.8	33.8	22.9	22.5	24.1
Five	Percent	17.5	9.7	6.9	9.9	11.5	11.3	11.0
Six or more	Percent	2.5	1.4	5.0	1.4	4.6	7.0	4.1
Children under age 19:								
Average	Number	1.2	1.3	1.3	1.2	1.2	1.3	1.2
Distribution:								
None	Percent	40.0	54.8	51.0	47.9	39.7	43.7	45.7
One	Percent	18.8	12.3	18.0	9.9	22.1	19.7	17.5
Two	Percent	25.0	27.4	21.0	31.0	24.4	19.7	24.5
Three	Percent	15.0	4.1	6.0	9.9	11.5	8.5	9.3
Four or more	Percent	1.3	1.4	4.0	1.4	2.3	8.4	3.0
Years respondent has lived in city:								
Average	Number	16.9	19.3	16.5	19.7	16.7	19.7	17.8
Distribution:								
5 years or less	Percent	31.3	15.7	32.7	25.3	24.2	14.3	24.5
6 to 10 years	Percent	18.7	13.7	13.0	18.3	16.5	23.0	16.9
11 to 15 years	Percent	10.0	21.9	13.0	7.0	17.2	17.3	14.6
16 to 20 years	Percent	6.3	19.1	9.0	7.0	15.5	7.1	11.1
21 to 30 years	Percent	16.2	9.7	15.0	16.8	11.9	12.8	13.2
31 to 40 years	Percent	10.0	11.1	12.0	16.8	8.6	17.2	11.2
41 years or more	Percent	7.5	9.7	6.0	8.4	7.2	8.5	4.2
Number of areas outside county where respondent has lived one year or longer:								
None	Percent	17.5	29.0	33.0	25.4	22.7	42.4	27.7
One	Percent	28.8	26.1	24.7	29.6	31.1	18.2	26.9
Two	Percent	28.8	14.5	18.6	16.9	21.0	18.2	19.9
Three	Percent	8.8	17.4	14.4	12.7	9.2	10.6	12.0
Four	Percent	10.0	4.3	1.0	5.6	6.7	1.5	5.0
More than four	Percent	6.3	2.9	8.2	9.8	83.3	9.1	8.6

TABLE 2. SELECTED DEMOGRAPHIC CHARACTERISTICS OF COMMUNITY RESIDENTS AND SPOUSES, BY TOWN (CONTINUED)

Item	Units	Carrington	Casselton	Grafton	Hettinger	Jamestown	Stanley	All
Number of years respondent has lived outside county: <sup>1</sup>								
Average	Years	18.2	19.3	18.6	18.8	18.7	15.6	18.4
Distribution:								
Less than 5 years	Percent	22.7	10.2	22.2	22.6	18.5	54.1	19.4
5 to 9 years	Percent	7.6	14.3	7.9	7.5	8.7	16.2	10.0
10 years or more	Percent	69.7	75.5	69.8	69.8	72.8	29.7	70.6
Has respondent ever lived outside state:								
No	Percent	66.3	41.4	52.5	45.1	52.8	44.1	51.0
Yes	Percent	33.8	58.9	47.5	54.9	47.2	55.9	49.0
Number of years respondent has lived outside state: <sup>1</sup>								
Average	Years	10.1	13.2	9.5	15.1	12.4	9.3	11.9
Distribution:								
1 to 2 years	Percent	29.6	27.9	31.3	30.8	20.6	28.9	26.7
3 to 5 years	Percent	14.8	16.3	18.8	10.3	25.3	31.6	20.4
6 to 10 years	Percent	25.9	14.0	16.7	10.3	12.8	7.9	14.1
11 to 20 years	Percent	18.5	20.9	18.7	20.5	16.0	15.8	18.4
More than 20 years	Percent	11.2	20.9	14.7	28.1	25.4	15.8	20.4
Highest level of education completed by respondent:								
Eighth grade or less	Percent	2.5	2.7	4.0	2.8	4.6	5.6	3.8
Some high school	Percent	6.3	5.5	3.0	2.8	4.6	8.5	5.0
Completed high school	Percent	37.5	32.9	35.0	42.3	30.8	46.5	36.6
Attended college or other postsecondary school	Percent	30.0	41.1	36.0	33.8	28.5	23.9	32.0
Completed college	Percent	23.8	17.8	22.0	18.3	31.5	15.5	22.7
Highest level of education completed by spouse:								
Eighth grade or less	Percent	5.0	5.5	7.6	8.5	3.2	2.2	5.2
Some high school	Percent	1.7	3.6	4.5	6.4	7.4	6.5	5.2
Completed high school	Percent	46.7	38.2	31.8	31.9	30.9	43.5	36.4
Attended college or other postsecondary school	Percent	35.0	32.7	39.4	34.0	29.8	21.7	32.3
Completed college	Percent	11.7	20.0	16.7	19.1	28.7	26.1	20.9

<sup>1</sup>Includes only those who have lived outside the county for one year or more.

<sup>2</sup>Includes only those who have lived outside the state for one year or more.

### Employment Characteristics

Selected employment characteristics of the community residents surveyed are summarized in Table 3 and Appendix Table 4. Of the respondents, 81.5 percent were currently employed, 8 percent were retired, and 10 percent were not employed. The respective percentages for spouses were quite similar. About 30 percent of the respondents and spouses had been employed at their present job for three years or less. These groups and those who were unemployed or retired were also asked whether they were former employees of a business that had closed or made personnel cutbacks in the last three years. Among these subgroups about 20 percent of the respondents and 15 percent of the spouses responded affirmatively to this question. At the other end of the spectrum, about one-third of the respondents and spouses had been at their job for over ten years.

TABLE 3. SELECTED EMPLOYMENT CHARACTERISTICS OF NORTH DAKOTA COMMUNITY RESIDENTS

Item	Units	Respondent	Spouse
<b>Employment status:</b>			
Employed	Percent	81.5	81.6
Retired	Percent	8.0	8.8
Not employed	Percent	10.3	9.6
<b>Former employee of a business that closed or cut back:<sup>a</sup></b>			
Yes	Percent	20.3	15.3
No	Percent	79.7	84.7
<b>Duration of current employment (in years):</b>			
0 - 1	Percent	15.0	13.1
2 - 3	Percent	16.4	15.1
4 - 5	Percent	13.8	15.8
5 - 10	Percent	22.0	22.3
10 - 15	Percent	13.8	14.1
15 - 20	Percent	9.9	8.2
Over 20	Percent	9.2	11.3
<b>Occupation in which employed:</b>			
Executive or managerial	Percent	14.2	15.2
Professional specialty	Percent	19.4	22.6
Technicians and repair services	Percent	4.9	3.5
Sales	Percent	9.1	10.6
Administrative specialties	Percent	13.7	16.3
Private household	Percent	0.0	b
Protective services	Percent	b	b
Service	Percent	15.2	9.9
Farming, forestry	Percent	2.2	3.2
Mechanics and repair services	Percent	2.7	2.8
Construction	Percent	5.9	3.5
Machine operator	Percent	1.5	2.1
Transportation	Percent	3.7	4.6
Handlers and laborers	Percent	2.7	3.9
Self employed	Percent	4.4	b
<b>Industry in which employed:</b>			
Agriculture	Percent	3.6	4.1
Mining	Percent	b	b
Construction	Percent	4.4	5.6
Manufacturing, nondurable	Percent	1.9	2.6
Manufacturing, durable	Percent	11.6	11.9
Wholesale, nondurable	Percent	3.6	5.6
Wholesale, durable	Percent	1.7	0.0
Retail trade	Percent	12.8	16.7
Finance, insurance, and real estate	Percent	5.3	9.6
Business and repair services	Percent	2.2	b
Personal services	Percent	2.2	1.9
Entertainment	Percent	b	b
Professional and related services	Percent	32.7	31.1
Government	Percent	12.8	7.8
Self employed	Percent	4.4	b

<sup>a</sup>Question was asked only of those unemployed, retired, or with less than three years' time at current job.

<sup>b</sup>N < 5.



The characteristics of persons who had been employees of businesses that had closed or made personnel cutbacks received special scrutiny. As noted earlier, about 5 percent of all survey respondents and their spouses fell into this category; some characteristics of this group are summarized in Appendix Table 6. About half of these displaced workers were less than 35 years old, and about 60 percent had children under age 18 at home. More than 79 percent of the men but only 54 percent of the women were married. About 73 percent of the men and 58 percent of the women were currently employed. About half of these formerly laid-off residents were not satisfied with their current employment and stated it was likely they would seek different employment in 1986 (a figure much higher than the 15 percent reported by the overall sample).

The industries in which respondents and spouses were most frequently employed included professional and related services, retail trade, government, and durable goods manufacturing. The most frequent occupations included professional specialties, services, executive or managerial positions, administrative support specialties, and sales (Table 3).

Employment characteristics of the survey respondents and their spouses are summarized by gender in Table 4. Of 411 male respondents and spouses whose employment status was reported, 86 percent were currently employed. The corresponding figure for female respondents and spouses was 77 percent. Female respondents and spouses tended to have been employed for a somewhat shorter period at their current job than their male counterparts. About one-third of the females had been at their current job less than four years, compared to 27 percent of males. Males were most frequently employed in durable goods manufacturing, professional specialties, and retail trade, while almost half of the females were employed by government (e.g., schools). The most frequent occupations for males were executive or manager, professional specialties, and sales, while females were concentrated in administrative support specialties, professional specialties, and service occupations (except protective and household).

Respondents and spouses also were asked whether they were likely to look for a different job in 1986. About 20 percent of the males and 16 percent of females were either very likely or likely to look for a different job (Table 5). The occupations most desired by males were construction trades, executive or managerial, and mechanics and repair, while females most frequently desired a job in a professional specialty or administrative support specialty. Of those who were likely to look for a new job, 72 percent would be willing to relocate. When asked where they would look for a job, about two-thirds indicated a place within the state as their first choice. Most of these persons named one of the state's four largest cities as the place they would look. In fact, Cass, Burleigh, Ward, and Grand Forks counties accounted for 75 percent of all the in-state responses. Those who would seek a job outside the state indicated a variety of potential destinations. The 24 respondents in this category named a total of 11 states; the most frequently mentioned were Colorado, Minnesota, Arizona, Montana, California, and South Dakota.

TABLE 4. SELECTED EMPLOYMENT CHARACTERISTICS OF NORTH DAKOTA COMMUNITY RESIDENTS, BY GENDER

Item	Male	Female
	-----percent-----	
Duration of current employment:		
Less than 1 year	12.9	15.5
2 - 3 years	13.7	18.0
4 - 5 years	11.4	17.7
6 - 10 years	21.1	23.1
11 - 15 years	14.3	13.5
16 - 20 years	10.9	7.6
Over 20 years	15.7	4.5
Occupation in which employed:		
Executive or managerial	20.4	9.3
Professional specialty	18.6	22.8
Technicians and repair services	2.7	5.9
Sales	10.8	8.7
Administrative specialties	3.3	25.6
Private household	0.3	0.3
Protective services	1.2	0.0
Services, except protective	3.9	21.6
Farming, forestry	4.8	0.6
Mechanics and repair services	5.4	0.3
Construction	9.3	0.8
Machine operator	2.4	1.1
Transportation	8.1	0.3
Handlers and laborers	5.7	0.8
Self-employed	3.3	2.0
Industry in which employed:		
Agriculture	7.6	0.3
Mining	0.9	0.0
Construction	10.0	0.0
Manufacturing, nondurable	3.0	1.5
Manufacturing, durable	18.5	5.7
Wholesale, nondurable	7.6	1.5
Wholesale, durable	2.1	0.0
Retail trade	14.0	15.5
Finance, insurance, and real estate	5.8	8.7
Business and repair services	2.4	1.5
Personal services	0.9	3.3
Entertainment	0.6	0.6
Professional and related services	17.0	48.7
Government	9.4	12.8

TABLE 5. CHARACTERISTICS OF THOSE LIKELY TO LOOK FOR DIFFERENT EMPLOYMENT IN 1986

Item	Units	Males	Females
Occupation desired:			
Executive or managerial	Percent	9.8	5.3
Professional specialty	Percent	9.8	19.3
Technicians and repair services	Percent	1.6	8.8
Sales	Percent	13.1	12.3
Administrative specialties	Percent	0.0	10.5
Service	Percent	8.2	33.3
Farming, forestry	Percent	4.9	0.0
Mechanics and repair services	Percent	8.2	0.0
Construction	Percent	23.0	1.8
Machine operator	Percent	4.9	3.5
Transportation	Percent	6.6	0.0
Handlers and lab	Percent	8.2	0.0
Self-employed	Percent	1.6	3.5
Private household	Percent	0.0	1.8
Willing to relocate:			
Yes	Percent	79.2	65.3
No	Percent	20.8	34.7
Where would you look for job:			
Within North Dakota	Percent	64.6	58.3
Out of state	Percent	35.4	41.7
Arizona	Percent	4.2	5.6
California	Percent	4.2	2.8
Colorado	Percent	10.4	5.6
Florida	Percent	2.1	2.8
Iowa	Percent	0.0	2.8
Kansas	Percent	0.0	2.8
Minnesota	Percent	4.2	11.1
Montana	Percent	4.2	2.8
Nebraska	Percent	2.1	2.8
South Dakota	Percent	4.2	0.0
Texas	Percent	0.0	2.8

The characteristics of those respondents who intended to look for a new job and were willing to move to do so are presented in Appendix Table 5. Generally, those willing to move were young, well-educated, single males. They had a higher average gross income than those unwilling to move (although the median was slightly lower), and those who were married had fewer children. Occupations they were willing to vacate were in services, construction, and professional specialties. Industries most affected would be professional services and retail. Although those willing to move had fewer children (largely due to the fact that about 40 percent were single), one-third had two or more children--a statistic quite similar to the sampled population as a whole.

Financial Resources

Financial resources of the community residents surveyed are summarized in Table 6 and Appendix Table 7. Total assets of these households averaged \$78,540, and their total debt averaged just over \$21,000. Assets varied substantially among towns; Stanley had the lowest value (\$56,167) and Jamestown had the highest (\$89,257). Average total debt was less variable and ranged from a low of \$18,282 in Hettinger to a high of \$25,964 in Carrington. It should be noted that a few households reporting substantially higher debts or assets can greatly affect the averages reported. To obtain a more accurate picture of the "typical" household, the median or midpoint value is also provided in Table 6. For example, the average debt is about \$21,000, but the median, or midpoint of responses, falls at \$7,500.

TABLE 6. FINANCIAL RESOURCES AND INCOME OF COMMUNITY RESIDENTS, BY TOWN, DECEMBER 31, 1985

Item	Units	Carrington	Casselton	Grafton	Hettinger	Jamestown	Stanley	All
Total assets								
Mean	Dollars	86,880	74,517	69,797	87,367	89,257	56,167	78,540
Median	Dollars	60,000	70,000	45,000	60,000	55,000	50,000	60,000
Total debt								
Mean	Dollars	25,964	18,657	21,758	18,282	19,811	22,943	21,037
Median	Dollars	13,000	5,000	10,000	9,000	7,500	4,500	7,500
Personal net worth								
Mean	Dollars	54,508	56,095	46,981	68,714	68,834	28,134	55,550
Median	Dollars	40,000	48,000	20,000	35,000	35,000	22,000	34,000
Total family income								
Mean	Dollars	26,628	27,898	24,867	26,642	25,546	22,826	25,741
Median	Dollars	19,000	27,500	20,000	21,000	24,000	23,500	23,000
Percent of income by source:								
Wages/salary	Percent	85.7	77.8	87.9	79.9	83.6	85.8	83.7
Interest	Percent	2.5	2.7	2.2	3.9	2.6	1.7	2.6
Rented out farmland	Percent	2.7	3.1	2.8	3.7	3.2	3.9	3.2
Retirement	Percent	5.2	7.2	3.6	5.0	2.2	3.5	4.2
Public assistance, including unemployment compensation	Percent	1.3	4.3	0.5	1.0	3.9	3.6	2.5
Oil and gas leases	Percent	0.0	0.3	0.0	0.0	0.1	0.2	0.1
Rental property	Percent	0.8	0.7	0.8	0.6	0.2	0.0	0.5
Stocks and bonds	Percent	0.1	0.6	0.2	1.2	1.4	1.3	0.8
Other	Percent	1.7	2.1	2.1	3.3	2.1	0.0	1.9

Personal net worth of the respondents ranged from almost \$69,000 in Hettinger and Jamestown to a low of just over \$28,000 in Stanley. No apparent patterns of systematic differences in net worth among trade centers of different sizes or in different locations in the state can be readily discerned. Again, note that the median falls considerably lower than the average value.

The total family income (adjusted gross income) of these households in 1985 also is reported in Table 6. Family income for the community residents averaged \$25,741, ranging from a high of \$27,898 (in Casselton)

to a low of \$22,826 (in Stanley). About 57 percent of all respondents reported family income between \$10,000 and \$30,000. Wages and salary accounted for about 84 percent of total income overall.

Examining total family income by marital and employment status reveals that 75.2 percent of the households of married individuals (or 61.1 percent of the total sample who provided relevant data) are represented by dual-earner couples (Appendix Table 8). These households, as expected, reported the highest average and median incomes. Households with only one married partner working reported considerably higher total family income than single employed individuals. In the case of males, married males earned an average of about \$7,800 more than single males. The differences are even more striking for females; married females earned an average of \$14,500 more than single females. The percentage of unemployed single males and females was too small to reliably analyze.

Differences in the age and educational levels and of the sources of income for these various groups explain some of the differences in income levels. Dual-earner households were comprised mainly of younger, well-educated persons; over 88 percent of these households received more than 90 percent of their income from wages and salaries. Similarly, single employed males and females were the youngest groups, and they also relied heavily on wages and salaries. All other marital-employment groups were, on the average, older and had more diversified sources of income. Households of married individuals unemployed at the time of the survey were comprised largely of retirement-age persons; only 14 percent had received some income from wages and salaries during the year. About 55 percent received some income from retirement pensions and plans, and 77 percent reported some income from other sources, such as interest and investments.

About 9.5 percent of these households had incomes below the poverty level in 1985. Some characteristics of the households whose incomes were below the poverty level are summarized in Appendix Table 9. These data indicate that households with incomes below the poverty level are much more likely to be headed by single individuals (65.1 percent compared to 30.2 percent for the total sample) and by persons with less than a high school education (18.6 percent compared to 6.5 percent for the total sample). Interestingly, about the same percentage of both groups (about 65 percent) had either completed high school or received some postsecondary education; however, the poverty group was less likely to have completed college.

The percentage of households with children under age 18 is not much different for households below the poverty level than for the total sample. In fact, although 9.5 percent of all households surveyed were below the poverty level, only 7.0 percent of all children under age 18 belonged to these households. Interestingly, women headed 91.7 percent of the poverty households of nonmarried persons with children under age 18. In addition, over half of the poverty households headed by a nonmarried female had children under age 18 compared to only 26 percent for the total sample. In comparison only about 12 percent of households headed by a nonmarried male had children under age 18 regardless of whether or not they were below the poverty level.

Trade Patterns

Trade patterns of community residents are summarized in Figure 3 and Appendix Table 10. The residents were asked where they obtained the majority of their needs for each of six goods and services. Food, hardware, and banking reflect trade patterns usually associated with convenience items. More than 85 percent of the residents reported purchasing a majority of these items in their hometown. An exception to this trend was in Casselton, located only 20 miles from Fargo, where only 42.5 percent of residents purchased most of their food locally.

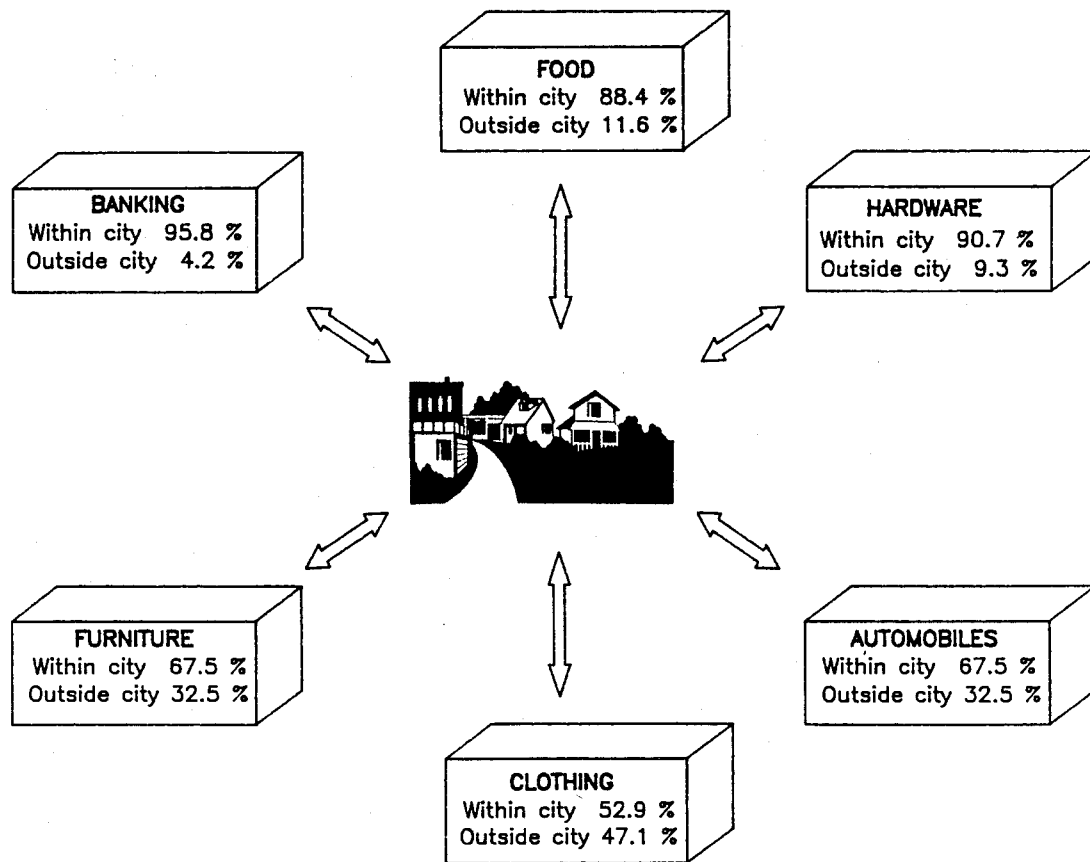


Figure 3. Percentage of Goods and Services Obtained by Residents Within and Outside Local City

Furniture, automobiles, and clothing are items which often represent a major expenditure and/or for which specific features or style may be important. As a result, prospective buyers frequently desire to compare prices and features of a number of products prior to making a selection. The data summarized in Appendix Table 10 reflect these patterns; about one-third of the residents went out of town to purchase furniture and automobiles, and nearly one-half went elsewhere to buy clothing. Considerable variations can be noted among towns with Jamestown usually having a higher than average rate of local shopping and Casselton having the lowest rate.

### Organizational Participation

Participation by community residents and their families in a number of community organizations and activities in 1985 is summarized in Figures 4 and 5 and in Appendix Table 11. Church was the most common form of organization of which these families were members, followed by civic and service clubs. This pattern was consistent across the six communities.

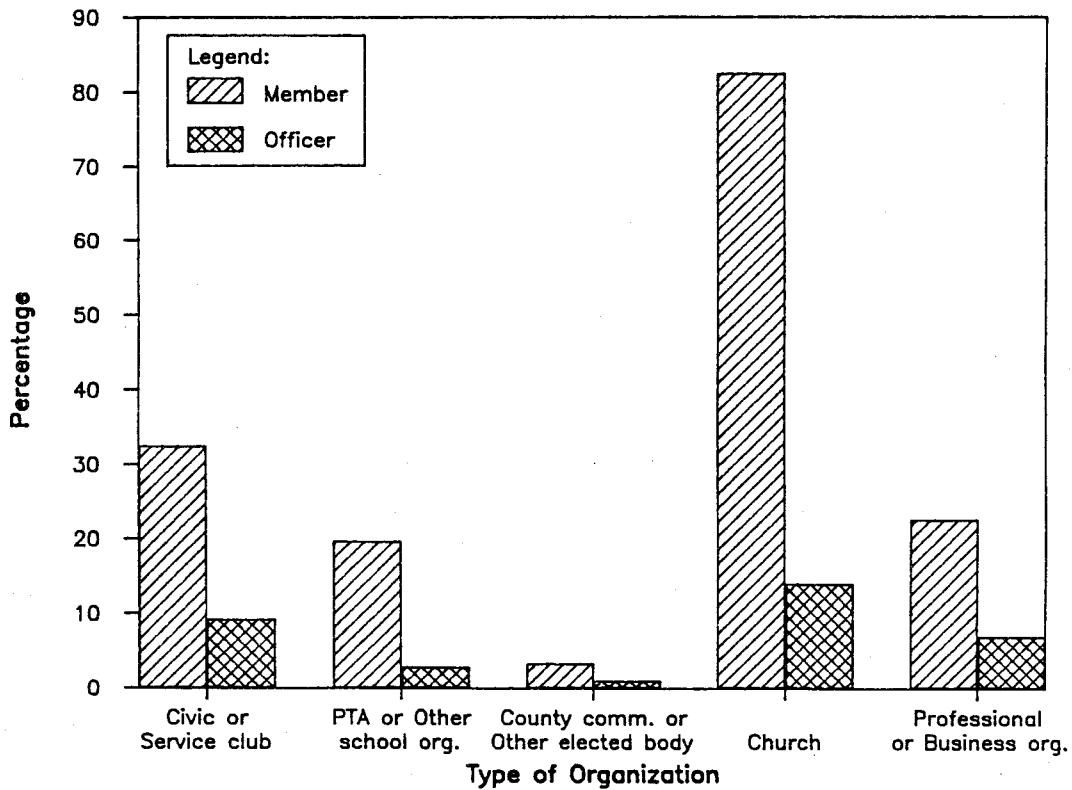


Figure 4. Organizational Participation of Community Residents, Respondents, 1985

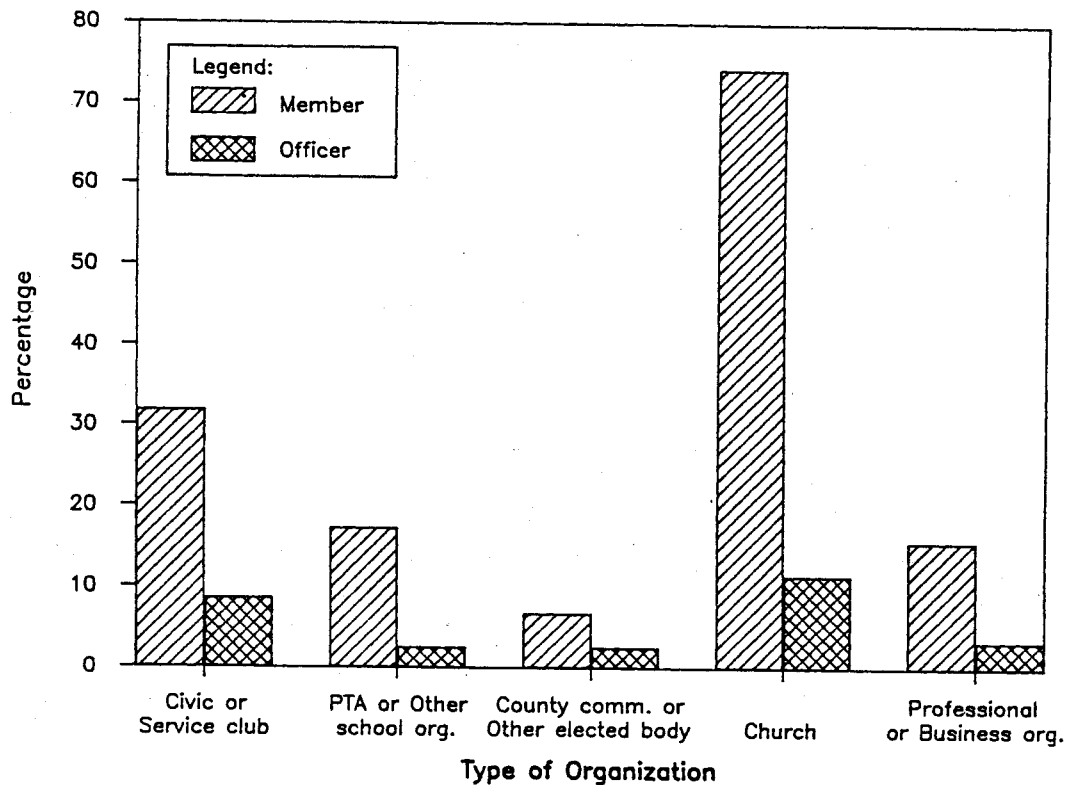


Figure 5. Organizational Participation of Community Residents, Spouses, 1985

### Conclusions and Implications

This study was initiated because of a concern that the economic decline in agriculture was imposing substantial secondary impacts on North Dakota's rural communities and their residents. The results of surveys of more than 500 residents in six North Dakota communities lead to a number of conclusions, which include the following.

- The respondents demonstrated considerable residential stability. The average resident had lived more than half of his or her life within the county where they now live. The average respondent was 40.5 years old, had lived within the county for an average of about 26 years, and had lived in the town for almost 18 years. About one-fourth of the respondents had never lived outside their county, and just over half had never lived outside the state.



- Educational levels of survey respondents reflect the state's tradition of secondary school completion. Only 8.8 percent of the respondents and 10.4 percent of their spouses had not completed high school. More than one-fifth of both respondents and spouses had completed college.
- Most of the survey respondents and their spouses were employed. About 86 percent of the males and 77 percent of females were employed at the time of the survey. The men were most often employed in durable goods manufacturing, professional specialties, and retail trade while the government sector was the largest employer for women.
- Total family income (adjusted gross income) of respondents' households in 1985 averaged about \$25,700. Half of the households reported incomes of \$23,000 or less, and 9.5 percent of all households had incomes below the poverty level.
- A number of survey respondents reported that they were former employees of a business that had closed or made personnel cuts in the last three years because of the depressed farm economy. Overall, about 30 percent of respondents and spouses had been employed at their present jobs less than three years. About 18 percent of this subgroup (or one in 20 of the total sample) reported that they were former employees of firms that had closed or made personnel cutbacks. These persons tended to be somewhat younger than the overall sample; about 78 percent were less than 45 years old. About 70 percent of these former employees were married, and 59 percent had children at home. About 79 percent of the men, but only 61 percent of the women, were currently employed; about 36 percent of the women planned to look for a different job in 1986.
- The financial resources of these displaced workers were relatively limited. Their median family income in 1985 was \$20,000 (compared to \$23,000 for the overall sample), and their median net worth was \$34,000 (the same value as that for the total sample).
- About 20 percent of men and 16 percent of women responding to the survey indicated that they were likely to look for a different job in 1986, and about 72 percent of these persons would be willing to relocate. Persons who would relocate were generally younger and better educated than average, and most would seek to relocate to one of North Dakota's larger cities. Thus, one effect of the current economic stress in agriculture may be to stimulate additional migration from the state's rural areas.

In summary, this survey of residents of six agricultural trade centers suggests that secondary effects of current economic stress in agriculture are now being experienced by many rural nonfarm residents. Some of these individuals have experienced job loss as their employers ceased operation or initiated personnel cutbacks, while others are contemplating relocation in hope of finding more satisfactory employment.

Thus, while the initial effects of reduced farm income have been largely experienced first by farmers and then by local businesses, particularly those dealing in durable goods, the reduced business volume and associated problems experienced by many businesses have led to layoffs, reduced hours, and decreased income for many employees. For rural nonfarm residents, as for farmers and rural business persons, adverse economic trends in agriculture have posed substantial adjustment problems.

## APPENDIX



APPENDIX TABLE 1. TOTAL RETAIL SALES AND CHANGE IN SALES IN NORTH DAKOTA COUNTIES, 1970-1985 (CONSTANT 1985 DOLLARS)

County Group	No. of Counties	Total Retail Sales <sup>a</sup>				Percent Change		
		1970	1975	1980	1985	1970-85	1970-80	1980-85
		-----dollars-----				-----percent-----		
Agricultural counties	39	773,849,645	964,371,060	755,165,843	617,061,526	-20.261	-2.414	-18.288
Other counties	14	2,100,282,978	2,780,379,900	2,682,964,915	2,391,816,314	13.880	27.743	-10.852
-----								
Counties with town(s) over 10,000	8	1,892,500,812	2,506,098,320	2,454,568,753	2,213,259,475	16.949	29.700	-9.831
Counties with no town(s) over 10,000	45	981,631,812	1,238,652,640	983,562,005	795,618,365	-18.949	0.197	-19.108
-----								
All counties	53	2,874,132,623	3,744,750,960	3,438,130,758	3,008,877,840	4.688	19.623	-12.485

<sup>a</sup>Based on sales reported in North Dakota's 200 largest towns. In 1985, these sales amounted to 88 percent of total taxable sales reported in the state. The reader also should note that, prior to 1976, sales from consolidated firms (those firms filing a single return including data for several plants) were assigned to the city (and county) containing the plant that filed the return. Since then, consolidated returns have not been included in city or county totals but, instead, have been reported in a category called "consolidated returns." The consolidated returns amounted to 10.3 percent of total in-state taxable sales in 1985, and sales of businesses located outside the largest 200 cities were 1.7 percent of the total (North Dakota State Tax Department).

APPENDIX TABLE 2. TOTAL EMPLOYMENT AND EMPLOYMENT CHANGE IN NORTH DAKOTA COUNTIES, 1980, 1984, AND 1985

County Group	No. of Counties	Total Employment			Change in Employment		Percent Change	
		1980	1984	1985	1980-85	1984-85	1980-85 <sup>a</sup>	1984-85 <sup>b</sup>
Agricultural counties <sup>c</sup>	39	109,643	104,554	98,062	-11,581	-6,492	-10.56	-6.21
Other counties	14	203,392	206,447	217,938	+14,546	+11,491	+7.15	+5.57
-----								
Counties with town(s) over 10,000	8	173,609	175,107	188,835	+15,226	+13,728	+8.77	+7.84
Counties with no town(s) over 10,000	45	139,426	135,894	127,165	-12,261	-8,729	-8.79	-6.42
-----								
All counties	53	313,035	311,001	316,000	+2,965	+4,999	+0.95	+1.61
-----								
Study counties:								
Adams	--	2,088	2,008	1,796	-292	-212	-13.98	-10.56
Cass	--	46,049	45,769	52,316	+6,267	+6,547	+13.61	+14.30
Foster	--	2,255	2,098	2,200	-55	+102	-2.44	+4.86
Mountrail	--	3,656	3,405	3,111	-545	-294	-14.91	-8.60
Stutsman	--	11,709	11,494	12,005	+296	+511	+2.53	+4.45
Walsh	--	8,091	8,228	7,706	-385	-522	-4.76	-6.34

a(1985 value minus 1980 value) divided by 1980 value.

b(1985 value minus 1984 value) divided by 1984 value.

cAs defined by Bender et al. 1985.

SOURCE: North Dakota Job Service 1980, 1984, 1985.

APPENDIX TABLE 3. SELECTED CHARACTERISTICS OF RESIDENTS OF SIX NORTH DAKOTA COMMUNITIES, 1980

Item	Persons Age 18 to 64 Years													
	Carrington		Casselton		Grafton		Hettinger		Jamestown		Stanley		All	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Age:														
18 to 24 years	257	19.6	104	12.2	576	18.5	174	19.0	2,403	24.8	170	19.7	3,684	22.0
25 to 34 years	360	27.5	257	30.2	850	27.4	270	29.5	2,665	27.6	242	28.0	4,644	27.8
35 to 44 years	222	17.0	191	22.5	595	19.2	152	16.6	1,564	16.2	119	13.8	2,843	17.0
45 to 54 years	288	22.0	139	16.4	499	16.1	143	15.6	1,768	18.3	127	14.7	2,964	17.7
55 to 64 years	182	13.9	158	18.6	584	18.8	175	19.1	1,271	13.1	205	23.8	2,575	15.4
Sex:														
Male	619	47.3	427	50.3	1,495	48.2	430	47.0	4,740	49.0	414	48.0	8,125	48.6
Female	690	52.7	422	49.7	1,609	51.8	484	53.0	4,931	51.0	449	52.0	8,585	51.4
Marital status (all age groups):														
Single	403	20.4	277	22.5	1,584	37.3	312	22.8	3,412	26.7	264	20.7	6,252	27.3
Married	1,258	63.5	771	62.7	2,071	48.8	833	60.8	7,176	56.1	804	63.0	12,913	56.4
Separated	--	0.0	6	0.5	66	1.6	7	0.5	175	1.4	7	0.5	261	1.1
Widowed	251	12.7	130	10.6	417	9.8	178	13.0	1,211	9.5	153	12.0	2,340	10.2
Divorced	68	3.4	46	3.7	107	2.5	40	2.9	816	6.4	49	3.8	1,126	4.9
Persons per household (all age groups)	2.59		2.70		2.57		2.40		2.50		2.45		2.52	
Occupation: <sup>a</sup>														
Executive or managerial	63	5.7	63	10.6	243	12.3	95	12.1	796	10.8	74	10.9	1,334	10.7
Professional specialty	154	14.0	80	13.4	190	9.6	89	11.3	930	12.7	78	11.4	1,521	12.2
Technicians and repair services	20	1.8	16	2.7	25	1.3	16	2.0	389	5.3	18	2.6	484	3.9
Sales	205	18.7	57	9.5	226	11.4	92	11.7	756	10.3	69	10.1	1,405	11.3
Administration specialties	154	14.0	100	16.8	212	10.7	108	13.7	1,025	14.0	72	10.6	1,671	13.4
Private household	19	1.7	6	1.0	--	0.0	11	1.4	10	0.1	15	2.2	61	0.5
Protection services	5	0.5	4	0.7	18	0.9	5	0.6	87	1.2	2	0.3	121	1.0
Service	173	15.8	66	11.1	428	21.7	123	15.6	1,420	19.3	95	13.9	2,305	18.5
Farming, forestry	17	1.5	40	6.7	137	6.9	40	5.1	135	1.8	53	7.8	422	3.4
Mechanics and repair services	125	11.4	81	13.6	233	11.8	94	11.9	903	12.3	114	16.7	1,550	12.4
Machine operator	46	4.2	37	6.2	79	4.0	19	2.4	282	3.8	19	2.8	482	3.9
Transportation	72	6.6	21	3.5	50	2.5	66	8.4	371	5.1	33	4.8	613	4.9
Handlers and lab	44	4.0	26	4.4	134	6.8	30	3.8	235	3.2	40	5.9	509	4.1
Industry: <sup>a</sup>														
Agriculture, mining	76	7.5	49	9.2	197	10.3	68	9.5	154	2.3	114	18.0	658	5.7
Construction	85	8.4	45	8.5	152	7.9	52	7.2	355	5.3	49	7.8	738	6.4
Manufacturing, nondurable	15	1.5	28	5.3	58	3.0	25	3.5	254	3.8	15	2.4	395	3.4
Manufacturing, durable	35	3.4	28	5.3	10	0.5	16	2.2	564	8.4	4	0.6	657	5.7
Wholesale, nondurable/durable	90	8.9	42	7.9	71	3.7	43	6.0	320	4.8	19	3.0	585	5.1
Retail trade	283	27.9	108	20.3	503	26.2	174	24.2	1,462	21.7	135	21.4	2,665	23.1
Finance and business	71	7.0	44	8.3	77	4.0	41	5.7	378	5.6	20	3.2	631	5.5
Business and repair services	13	1.3	27	5.1	84	4.4	11	1.5	163	2.4	30	4.7	328	2.8
Personal services/entertainment	61	6.0	25	4.7	57	3.0	45	6.3	373	5.5	38	6.0	599	5.2
Professional	252	24.8	120	22.6	630	32.8	202	28.1	2,361	35.1	172	27.2	3,737	32.4
Government	35	3.4	16	3.0	81	4.2	41	5.7	345	5.1	36	5.7	554	4.8
Median income (all age groups):														
Household	\$14,833		\$15,731		\$13,900		\$15,046		\$15,516		\$13,644			
Family	\$17,655		\$19,012		\$18,020		\$17,500		\$19,482		\$16,394			

<sup>a</sup>Age 16 and over.

SOURCE: U.S. Bureau of the Census 1980.

APPENDIX TABLE 4. SELECTED EMPLOYMENT CHARACTERISTICS OF SIX NORTH DAKOTA COMMUNITIES

Item	Carrington		Casselton		Grafton		Hettinger		Jamestown		Stanley	
	Resp.	Spouse	Resp.	Spouse	Resp.	Spouse	Resp.	Spouse	Resp.	Spouse	Resp.	Spouse
	-----percent-----											
Employment status:												
Employed	81.3	75.0	74.0	76.4	86.9	76.9	77.5	87.2	83.7	86.0	81.7	88.7
Retired	1.9	3.3	9.5	8.6	5.1	6.6	15.3	10.6	2.2	3.7	6.1	4.2
Not employed	16.9	21.7	16.5	15.0	8.0	16.5	7.2	2.2	13.3	10.3	12.2	7.1
Former employee of a business that closed or cut back:												
Yes	14.7	16.7	9.4	8.1	21.4	11.5	16.7	11.5	26.4	24.9	37.5	18.2
No	85.3	83.3	90.6	91.9	78.6	88.5	83.3	88.7	73.6	75.1	62.5	81.8
Duration of current employment:												
0-1 year	18.8	20.0	13.2	12.2	10.3	12.5	18.4	10.0	13.3	11.5	19.6	12.8
2-3 years	17.2	11.1	7.5	9.8	16.1	14.6	26.5	20.0	18.1	19.2	12.5	12.8
4-5 years	9.4	17.8	11.3	9.8	25.3	18.8	12.2	17.5	11.4	12.8	8.9	20.5
5-10 years	28.1	17.8	20.8	26.8	12.6	22.9	12.2	22.5	23.8	17.9	35.7	30.8
10-15 years	12.5	13.3	17.0	14.6	13.8	10.4	14.3	7.5	15.2	17.9	8.9	17.9
15-20 years	4.7	6.7	18.9	12.2	11.5	8.3	8.2	7.5	9.5	10.3	7.1	2.6
Over 20 years	9.4	13.3	11.3	14.6	10.3	12.5	8.2	15.0	8.6	10.3	7.1	2.6
Occupation in which employed:												
Executive or managerial	21.3	31.7	22.9	12.2	9.4	8.5	5.7	12.5	13.2	17.1	16.4	8.1
Professional specialty	19.7	9.8	10.4	26.8	27.1	21.3	22.6	25.0	17.9	27.6	14.5	21.6
Technicians and repair services	a	0.0	6.3	0.0	a	8.5	9.4	5.0	5.7	5.3	a	0.0
Sales	9.8	12.2	12.5	7.3	5.9	6.4	7.5	12.5	8.5	9.2	12.7	18.9
Administrative specialties	14.8	7.3	6.3	31.7	10.6	19.1	9.4	20.0	24.5	9.2	7.3	16.2
Private household	0.0	a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Protective services	0.0	a	0.0	0.0	0.0	0.0	0.0	0.0	a	a	a	0.0
Service	14.8	9.8	6.3	a	23.5	17.0	15.1	10.0	9.4	6.6	21.8	13.5
Farming, forestry	a	9.8	a	a	a	a	5.7	a	0.0	a	a	0.0
Mechanics and repair services	4.9	a	a	a	a	0.0	0.0	0.0	a	6.6	a	a
Construction	6.6	0.0	a	a	5.9	8.5	9.4	0.0	a	5.3	7.3	a
Machine operator	0.0	0.0	6.3	a	a	a	a	a	0.0	a	a	0.0
Transportation	a	a	6.3	a	0.0	0.0	11.3	7.5	a	a	0.0	10.8
Handlers and lab	0.0	a	a	a	a	a	a	a	a	a	a	5.4
Self-employed	0.0	0.0	10.4	0.0	a	0.0	0.0	0.0	6.6	0.0	5.5	0.0
Industry in which employed:												
Agriculture	a	9.3	5.8	a	a	a	8.2	5.6	a	a	a	0.0
Mining	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	a	5.4
Construction	a	11.6	7.7	5.1	a	8.9	a	a	5.2	a	7.4	a
Mfg., nondurable	a	a	a	5.1	0.0	a	8.2	8.3	0.0	0.0	a	0.0
Mfg., durable	6.3	a	19.2	7.7	7.4	a	14.3	13.9	15.6	21.4	11.1	13.5
Wholesale, nondurable	7.9	9.3	a	7.7	0.0	0.0	a	a	5.2	7.1	7.4	5.4
Wholesale, durable	a	0.0	a	0.0	a	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Retail trade	9.5	20.9	15.4	10.3	12.3	22.2	10.2	8.3	15.6	14.3	16.7	24.3
Finance, insurance, and real estate	11.1	11.6	7.7	10.3	6.2	a	0.0	5.6	5.2	10.0	a	16.2
Business and repair services	a	a	7.7	5.1	0.0	0.0	a	0.0	a	a	0.0	0.0
Personal services	6.3	a	a	a	a	a	a	0.0	0.0	a	a	0.0
Entertainment	0.0	a	a	a	0.0	0.0	0.0	0.0	a	0.0	0.0	0.0
Professional and related services	36.5	16.3	15.4	38.5	28.4	31.1	42.9	47.2	39.6	28.6	40.7	29.7
Government	7.9	7.0	5.8	a	34.6	20.0	8.2	5.6	9.4	7.1	7.4	a
Self-employed	0.0	0.0	0.0	0.0	0.0	a	0.0	0.0	0.0	0.0	0.0	0.0

aLess than 5 percent.



APPENDIX TABLE 5. SELECTED DEMOGRAPHIC AND EMPLOYMENT CHARACTERISTICS OF RESPONDENTS WILLING AND NOT WILLING TO MOVE TO CHANGE JOBS

Item	Willing to Move	Not Willing to Move	All Respondents
	-----percent-----		
<b>Age:</b>			
Less than 35	60.3	59.4	38.1
35-44	19.2	25.0	25.4
45-54	16.7	12.5	16.9
55 and over	3.9	3.1	19.7
<b>Education:</b>			
Completed 8th grade	2.6	0.0	3.8
Some high school	7.7	15.6	5.0
Completed high school	30.8	37.5	36.6
Attended college or other postsecondary school	35.9	21.9	32.0
Completed college	23.1	25.0	22.7
<b>Sex:</b>			
Male	53.9	28.1	46.5
Female	46.2	71.9	53.5
<b>Marital status:</b>			
Married	48.7	68.8	69.8
Single	41.0	18.8	15.2
Separated or divorced	7.7	9.4	9.1
Widowed	2.6	3.1	5.9
<b>Number of children under 18:</b>			
None	53.9	34.4	45.7
1	11.5	25.0	17.5
2	21.8	21.9	24.5
3 or more	12.8	18.8	12.3
<b>Family gross income:</b>			
Mean	\$20,080	\$17,907	\$25,741
Median	\$18,000	\$19,000	\$23,000
<b>Distribution:</b>			
Under \$10,000	18.8	15.4	14.4
\$10,000 - \$19,999	39.1	34.6	31.0
\$20,000 - \$39,999	36.2	46.2	40.9
\$40,000 and over	5.8	3.9	13.7
<b>Present employment:</b>			
<b>Occupation:</b>			
Executive or managerial	6.5	0.0	14.2
Professional specialties	16.1	23.5	19.4
Technician	6.5	0.0	4.9
Sales	9.7	23.5	9.1
Administrative support	3.2	5.9	13.7
Service	24.2	23.5	15.2
Farming	3.2	0.0	2.2
Mechanic	3.2	0.0	2.7
Construction	17.7	0.0	5.9
Machine operator	0.0	17.7	1.5
Transportation	1.6	0.0	3.7
Handler	4.8	0.0	2.7
Self-employed	3.2	5.9	4.4
<b>Industry:</b>			
Agriculture	6.6	0.0	3.6
Construction	11.5	0.0	4.4
Manufacturing	6.6	21.0	13.5
Wholesale	4.9	5.3	5.3
Retail trade	21.3	21.1	12.8
Personal services	4.9	5.3	2.2
Professional and related services	27.9	26.3	32.7
Government	11.5	15.8	12.8
Other	4.9	5.2	12.7

APPENDIX TABLE 6. CHARACTERISTICS OF RESPONDENTS AND SPOUSES WHO WERE FORMER EMPLOYEES OF A BUSINESS THAT CLOSED OR MADE PERSONNEL CUTBACKS

Item	Males	Females	Total
	-----percent-----		
Age:			
Less than 35	47.9	50.0	48.6
35 - 44	33.3	25.0	30.6
45 - 54	10.4	4.2	8.3
55 or more	8.3	20.8	12.5
Percent married	79.2	54.2	70.8
Percent with children in household	60.4	62.5	61.1
Percent currently employed	72.9	58.3	68.1
Percent likely or very likely to look for a different job	48.6	50.0	49.0

APPENDIX TABLE 7. FINANCIAL RESOURCES AND INCOME OF COMMUNITY RESIDENTS, BY TOWN

Item	Units	Carrington	Casselton	Grafton	Hettinger	Jamestown	Stanley	All
<b>Total assets, January 1, 1986:</b>								
Mean	Dollars	86,880	74,517	69,797	87,367	89,257	56,167	78,540
Median	Dollars	60,000	70,000	45,000	60,000	55,000	50,000	60,000
Distribution:								
\$0 to \$10,000	Percent	11.1	10.3	22.8	20.0	13.7	16.7	16.0
\$10,001 to \$25,000	Percent	13.0	12.1	11.4	10.0	15.8	16.6	13.2
\$25,001 to \$50,000	Percent	16.6	13.8	21.5	15.0	20.0	18.8	18.0
\$50,001 to \$100,000	Percent	35.2	51.7	26.6	38.3	31.6	41.6	36.3
\$100,001 or more	Percent	24.1	12.1	17.7	16.7	18.9	6.3	16.5
<b>Total debt, January 1, 1986:</b>								
Mean	Dollars	25,964	18,657	21,758	18,282	19,811	22,943	21,037
Median	Dollars	13,000	5,000	10,000	9,000	7,500	4,500	7,500
Distribution:								
\$0 to \$10,000	Percent	46.6	59.0	54.1	55.4	56.0	60.3	55.3
\$10,001 to \$25,000	Percent	22.4	18.0	17.7	12.3	16.5	17.3	17.2
\$25,001 to \$50,000	Percent	17.2	16.4	22.3	24.6	22.0	13.8	19.9
\$50,001 to \$100,000	Percent	8.6	3.2	1.2	7.7	4.6	3.4	4.6
\$100,001 or more	Percent	5.2	3.3	4.7	0.0	0.9	5.2	3.0
<b>Personal net worth, January 1, 1986:</b>								
Mean	Dollars	54,508	56,095	46,981	68,714	68,834	28,134	55,550
Median	Dollars	40,000	48,000	20,000	35,000	35,000	22,000	34,000
Distribution:								
Negative	Percent	6.1	3.5	7.6	5.1	4.4	8.5	5.8
\$0 to \$10,000	Percent	20.4	12.3	30.4	23.7	19.8	21.3	21.7
\$10,001 to \$25,000	Percent	12.3	14.0	17.7	11.9	18.7	25.5	16.7
\$25,001 to \$50,000	Percent	28.5	24.6	15.2	23.7	23.0	21.3	22.3
\$50,001 to \$100,000	Percent	18.4	38.6	15.2	22.0	19.8	21.3	22.0
\$100,001 to more	Percent	14.3	7.0	13.9	13.6	14.3	2.1	11.5
<b>Total family income, 1985:</b>								
Mean	Dollars	26,628	27,898	24,867	26,642	25,546	22,826	25,741
Median	Dollars	19,000	27,500	20,000	21,000	24,000	23,500	23,000
Distribution:								
\$0 to \$10,000	Percent	9.0	12.1	12.5	19.7	14.7	18.5	14.4
\$10,001 to \$20,000	Percent	46.2	16.7	38.6	27.8	30.1	24.1	31.0
\$20,001 to \$30,000	Percent	20.9	30.3	19.4	23.0	27.6	42.6	26.5
\$30,001 to \$40,000	Percent	12.0	21.2	14.7	16.4	14.7	5.5	14.4
More than \$40,000	Percent	11.9	19.7	14.8	13.1	12.9	9.3	13.7
<b>Percent of income by source:</b>								
Wages/salary	Percent	85.7	77.8	87.9	79.9	83.6	85.8	83.7
Interest	Percent	2.5	2.7	2.2	3.9	2.6	1.7	2.6
Rented out farmland	Percent	2.7	3.1	2.8	3.7	3.2	3.9	3.2
Retirement	Percent	5.2	7.2	3.6	5.0	2.2	3.5	4.2
Public assistance, including unemployment compensation	Percent	1.3	4.3	0.5	1.0	3.9	3.6	2.5
Oil and gas leases	Percent	0.0	0.3	0.0	0.0	0.1	0.2	0.1
Rental property	Percent	0.8	0.7	0.8	0.6	0.2	0.0	0.5
Stocks and bonds	Percent	0.1	0.6	0.2	1.2	1.4	1.3	0.8
Other	Percent	1.7	2.1	2.1	3.3	2.1	0.0	1.9

APPENDIX TABLE 8. TOTAL FAMILY INCOME OF MARRIED AND SINGLE HOUSEHOLDS BY GENDER AND EMPLOYMENT STATUS

Category	Mean	Median	N
	-----dollars-----		
Married, both employed	32,005	29,000	228
Married, male employed	24,904	22,000	49
Married, female employed	28,059	25,000	17
Married, neither employed	20,722	20,000	18
Single male employed	17,100	15,000	26
Single female employed	13,607	14,000	33
Single male unemployed	16,333	9,500	6
Single female unemployed	8,400	5,000	4

APPENDIX TABLE 9. CHARACTERISTICS OF HOUSEHOLDS BELOW POVERTY INCOME LEVEL IN 1985 COMPARED TO TOTAL SAMPLE

Item	Poverty Group	Total Sample
	-----percent-----	
Marital status:		
Single	39.5	15.2
Married	34.9	69.8
Separated or divorced	23.3	9.1
Widowed	2.3	5.9
Respondent age:		
Less than 35 years	39.5	38.1
35 - 44 years	20.9	25.4
45 - 54 years	20.9	16.9
55 - 64 years	18.6	19.7
Highest level of education completed by either respondent or spouse:		
Eighth grade or less	9.3	2.5
Some high school	9.3	4.0
Completed high school	34.9	30.6
Attended college or other postsecondary school	32.6	35.2
Completed college	14.0	27.7

APPENDIX TABLE 10. TRADE PATTERNS OF COMMUNITY RESIDENTS, BY TOWN

Goods or Services	Units	Carrington	Casselton	Grafton	Hettinger	Jamestown	Stanley	All
<b>Food</b>								
Within city	Percent	93.7	42.5	91.0	95.8	100.0	97.2	88.4
Outside city	Percent	6.3	57.5	9.0	4.2	0.0	2.8	11.6
Mean	Miles	62.0	20.6	40.0	69.0	0.0	45.0	30.0
Distribution:								
1-25 miles	Percent	0.0	100.0	0.0	0.0	0.0	0.0	68.9
26-50 miles	Percent	80.0	0.0	100.0	0.0	0.0	100.0	24.6
51-100 miles	Percent	0.0	0.0	0.0	100.0	0.0	0.0	4.9
Over 100 miles	Percent	20.0	0.0	0.0	0.0	0.0	0.0	1.6
<b>Hardware</b>								
Within city	Percent	94.9	74.0	88.0	97.2	97.0	88.7	90.7
Outside city	Percent	5.1	26.0	12.0	2.8	3.1	11.3	9.3
Mean	Miles	67.3	20.1	43.6	200.0	100.0	53.3	49.0
Distribution:								
1-25	Percent	0.0	100.0	8.3	0.0	0.0	0.0	40.8
26-50	Percent	75.0	0.0	83.3	0.0	0.0	25.0	30.6
51-100	Percent	0.0	0.0	0.0	0.0	100.0	75.0	20.4
Over 100	Percent	25.0	0.0	8.3	100.0	0.0	0.0	8.2
<b>Banking</b>								
Within city	Percent	97.5	87.7	98.0	95.8	97.7	95.8	95.8
Outside city	Percent	2.5	12.3	2.0	4.2	2.3	4.2	4.2
Mean	Miles	93.0	20.1	25.0	62.0	146.7	45.7	53.6
Distribution:								
1-25	Percent	0.0	100.0	50.0	0.0	0.0	0.0	45.5
26-50	Percent	50.0	0.0	50.0	66.7	33.3	33.3	27.3
51-100	Percent	0.0	0.0	0.0	0.0	33.3	66.7	13.6
Over 100	Percent	50.0	0.0	0.0	33.3	33.3	0.0	13.6
<b>Furniture</b>								
Within city	Percent	49.4	15.1	69.0	85.7	87.7	84.5	67.5
Outside city	Percent	50.6	84.9	31.0	14.3	12.3	15.5	32.5
Mean	Miles	59.6	20.6	41.2	98.3	107.6	55.3	48.5
Distribution:								
1-25	Percent	5.0	100.0	6.5	20.0	12.5	0.0	41.2
26-50	Percent	72.5	0.0	90.3	0.0	75.0	18.2	34.7
51-100	Percent	5.0	0.0	0.0	50.0	0.0	81.8	16.5
Over 100	Percent	17.5	0.0	3.2	30.0	12.5	0.0	7.7
<b>Automobiles</b>								
Within city	Percent	67.5	4.2	78.6	73.2	88.6	71.8	67.5
Outside city	Percent	32.5	95.8	21.4	26.8	11.5	28.2	32.5
Mean	Miles	67.8	21.3	60.8	104.7	98.0	74.1	55.5
Distribution:								
1-25	Percent	4.0	97.1	4.8	0.0	0.0	5.0	41.4
26-50	Percent	56.0	2.9	76.2	10.5	20.0	10.0	23.1
51-100	Percent	20.0	0.0	4.8	63.2	66.7	75.0	25.4
Over 100	Percent	20.0	0.0	14.3	26.3	13.3	10.0	10.1
<b>Clothing</b>								
Within city	Percent	44.3	5.5	52.5	64.8	79.4	50.7	52.9
Outside city	Percent	55.7	94.5	47.5	35.2	20.6	49.3	47.1
Mean	Miles	73.5	23.9	46.5	128.1	107.0	53.3	60.8
Distribution:								
1-25	Percent	0.0	98.6	10.6	0.0	3.7	2.9	30.4
26-50	Percent	68.2	0.0	80.9	0.0	0.0	17.1	30.0
51-100	Percent	0.0	0.0	0.0	60.0	85.2	80.0	26.7
Over 100	Percent	31.8	1.5	8.5	40.0	11.1	0.0	13.0

APPENDIX TABLE 11. ORGANIZATIONAL MEMBERSHIP AND PARTICIPATION CHARACTERISTICS OF COMMUNITY RESIDENTS AND SPOUSES, BY TOWN

Item	Carrington		Casselton		Grafton		Hettinger		Jamestown		Stanley		All	
	Resp.	Spouse	Resp.	Spouse	Resp.	Spouse	Resp.	Spouse	Resp.	Spouse	Resp.	Spouse	Resp.	Spouse
	-----percent-----													
Was respondent or spouse a member of:														
Civic or service club														
Yes	26.3	26.0	34.2	33.3	35.0	32.8	35.2	36.2	33.6	30.5	29.6	37.0	32.5	31.9
PTA or other school organization														
Yes	17.5	16.4	8.5	5.6	21.0	22.7	18.3	10.6	28.2	26.3	16.9	13.0	19.7	17.3
County commission or other elected body														
Yes	0.0	4.1	6.9	13.0	3.0	6.1	4.2	4.3	3.1	7.4	4.2	6.5	3.4	6.8
Church														
Yes	81.3	68.5	76.7	69.1	82.0	72.7	80.3	76.6	85.5	76.8	87.3	84.8	82.5	74.3
Professional or business organization														
Yes	22.5	17.8	18.1	13.0	16.0	12.1	25.4	21.3	28.2	17.7	23.9	10.9	22.7	15.7
Was operator or spouse an officer of:														
Civic or service club														
Yes	7.5	8.2	8.2	13.0	10.0	6.0	14.1	8.5	9.2	6.3	7.1	13.3	9.3	8.7
PTA														
Yes	2.5	4.1	2.8	1.9	1.0	3.0	4.2	0.0	3.8	2.1	2.9	4.4	2.9	2.6
County commission or other elected body														
Yes	0.0	2.7	2.8	3.7	1.0	3.0	1.4	0.0	1.5	3.2	0.0	2.2	1.1	2.6
Church														
Yes	11.3	8.2	20.5	9.1	9.0	10.6	14.1	8.5	18.3	16.8	10.0	13.3	14.1	11.5
Professional or business organization														
Yes	5.0	4.1	6.9	5.6	5.0	3.0	5.6	0.0	9.3	5.2	9.9	0.0	7.1	3.4
Did respondent (or spouse) attend NDSU field days, short courses, etc. last year:														
Yes	16.3	--	13.7	--	12.0	--	16.9	--	15.3	--	12.7	--	14.4	--
Did respondent acquire any NDSU literature last year:														
Yes	32.5	--	38.4	--	26.0	--	36.6	--	31.3	--	21.1	--	30.8	--





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