



## Methodology

Since 1982, Iowa State University Extension and the Agricultural and Home Economics Experiment Station, in cooperation with the Iowa Department of Agriculture and Land Stewardship – Division of Statistics, has conducted a statewide survey of Iowa farm operators. Extension staff and university researchers must keep informed on farm and rural issues to remain responsive to the needs of agricultural producers and farm families. The survey was mailed in late February to 3,977 randomly selected producers. Usable replies were received from 2,198 respondents, which yielded a 55 percent response rate. We are grateful to the farm families that participated in this year's survey.

## Highlights from the 1997 Poll

### Perceptions of Risk

In last year's survey, a number of producers voiced concerns about increased levels of risk in farming. Consistent with several comments we received last year, many producers are concerned about increased levels of risk. Producers were asked to indicate their perceptions of changes in risk on a five-point scale (Table 1). Two-thirds (66 percent) of the respondents indicated that risk in farming has increased in the past five years, and 75 percent report they expect risk to increase in the next five years. Given perceptions of increased risk,

**Table 1. Opinions about Risk Levels in Farming**

	Decreased <u>Greatly</u>		Increased <u>Greatly</u>		
	----- percent -----				
Over the past 5 years, has the level of risk in farming	2	4	29	36	30
In the next 5 years, the level of risk in farming will	1	3	21	42	33
Over the past 5 years, the level of stress in my family has	6	14	36	24	20

one would expect elevated familial stress. This is confirmed by 44 percent reporting increased stress in their family in the past five years.

Table 2 explores 12 dimensions of risk that may be related to producers perceptions that risk will increase in the next five years. Respondents were asked to rate the likelihood of these things happening in the next five years on a scale that ranged from "very unlikely" to "very likely." The items are presented in descending order for ease of presentation.

Dimensions that producers felt were most likely to occur in the next five years include: input costs rising faster than commodity prices and yields (76 percent), increased commodity price volatility (69 percent), and at least one crop failure due to adverse weather (58 percent).

**Table 2. What is the likelihood of these things happening in the next 5 years?**

	<u>Very Unlikely</u>	----- percent -----			<u>Very Likely</u>
Input costs will increase faster than commodity prices and yields .....	4	5	13	25	51
There will be increased commodity price volatility compared to the past 5 years .....	4	8	17	23	46
You will experience at least one crop failure (yield loss of 30 percent or more) due to adverse weather ..	5	12	22	21	37
You will market your farm commodities at prices at least 20 percent below market highs .....	6	13	29	23	27
Prices for farm products will decline by at least 30 percent from current levels .....	13	24	29	17	16
You will have insect/disease outbreak that will result in 20 percent yield reduction .....	11	29	30	17	10
You will have trouble meeting environmental regulations .....	38	27	14	10	9
You will have a serious disease outbreak among your livestock .....	21	21	18	10	5
You or a family member will have a major farm accident or injury .....	21	31	34	8	4
You will be sued by someone who might be injured on your property .....	28	31	27	8	4
You will fall behind in making mortgage or land payments .....	46	22	13	6	5
You will be sued by neighbors for infringing on their quality of life .....	57	21	8	4	4

Fifty percent felt they would likely miss the market high by at least 20 percent. One-third (32 percent) indicated that it is likely that commodity prices will decline by at least 30 percent in the next five years, although 37 percent felt this was unlikely. Twenty-seven percent indicated that a 20 percent yield reduction due to insects or disease is likely in the next five years.

In spite of much media attention and debate about environmental regulations, only about one

in five (19 percent) indicated it was likely that they would have trouble meeting environmental regulations. On the other hand, 65 percent indicated it was unlikely they would have trouble meeting environmental regulations. Other factors that were given low probability of occurring include: disease outbreak among livestock, farm accident or injury, being sued by someone injured on your property, falling behind on mortgage, and being sued by neighbors for infringing on their quality of life.

## Risk Management

Given the perceptions of increased risk, producers were asked what strategies they are using or plan to use to reduce risk (Table 3). The risk management strategies are ordered by the proportion of producers who are currently using them. Two-thirds of the respondents indicate they are currently using crop insurance, and an additional 5 percent are planning to buy crop insurance. The second most frequently cited risk management was reducing debt (55 percent), and 18 percent are planning on making reductions in their debt. Diversification of their farm by adding livestock is being used by 41 percent, and is being planned by an additional 7 percent. About one-third of the respondents use forward contracting to sell crops or livestock or buying inputs. Doing a financial analysis of their

farm and adopting a comprehensive marketing plan was reported by about one-fourth of the respondents. Using the futures options/market, buying revenue insurance, joining a value-added cooperative, adding new crops, and producing crops or livestock under a production contract were used by less than 20 percent of the respondents.

## Use of Contracts to Manage Risk

Only a small number of respondents report producing crops or livestock under contract (Table 4). Because of the small number of producers with contracts, Table 4 shows both the number of producers as well as the proportion of the sample using contracts, along with satisfaction levels of those producers with contracts. For example, 181 farmers, or about 8

**Table 3. There are a number of strategies that producers may use to reduce risk in their farming operations. Which ones have you used or do you plan to use to reduce risk on your farm?**

	<u>Have used in the past, but not currently using</u>	<u>Am currently using</u>	<u>Am planning on using</u>	<u>Have not used and do not plan to use</u>
	----- percent -----			
Bought crop insurance .....	11	67	5	17
Reduced debt .....	12	55	18	15
Diversified farm by adding livestock.....	17	41	7	34
Used forward contracting to sell crops or livestock .....	17	36	9	38
Used forward contracting to buy inputs .....	7	32	8	53
Implemented financial analysis of your farm .....	6	27	12	55
Adopted a comprehensive marketing plan.....	5	25	22	48
Used futures options/market .....	16	18	12	54
Bought revenue insurance .....	6	17	14	63
Joined a value added cooperative .....	4	13	10	73
Diversified farm by adding new crops .....	9	12	12	67
Produced crops under production contract .....	9	10	7	74
Employed a professional farm manager/ consultant ...	4	6	3	87
Produced livestock under production contract .....	6	4	3	87

**Table 4. Use of Contracts**

	<u>Number</u>	<u>Percent of Total Sample</u>	<u>Percent Reporting</u>	
			<u>Very Satisfied</u>	<u>Somewhat Satisfied</u>
Corn (including seed corn) .....	181	8	34	51
Soybeans .....	166	7	34	50
Hogs .....	99	4	31	50
Cattle .....	32	1	37	47
New crops (such as canola or edible beans) .....	27	1	30	44

percent of the total sample, are producing corn under contract. Thirty-four percent of those producing corn under contract reported being

very satisfied, and 51 percent were somewhat satisfied. There was little variation in satisfaction levels across each of the commodities.

### Public Health Issues

Respondents were asked to rate 13 public health risks on a 5-point scale from "1" indicating 'of little importance' to "5" indicating 'major importance' (Table 5). The items are presented in descending order based upon the mean score. The four highest rated public health issues were drunken driving that received an average score of 4.2, followed by sexually transmitted diseases (3.9), tobacco use (3.8), and alcohol use (3.8). Food poisoning, firearms, and radon in basements were judged as posing the least risks to public health.

**Table 5. Public Health Issues**

	<u>Of Little Importance</u>	<u>Level of Risk to the Public</u>			<u>Mean</u>	
		<u>Moderate Importance</u>	<u>Major Importance</u>	<u>percent</u>		
Drunk driving .....	3	4	16	25	52	4.2
Sexually transmitted diseases .....	6	6	20	25	42	3.9
Tobacco use .....	7	7	22	23	41	3.8
Alcohol use .....	6	6	24	27	37	3.8
Motor vehicle accidents .....	2	9	34	30	25	3.7
Fires in the home .....	4	14	35	24	23	3.5
Water pollution .....	4	13	32	24	27	3.5
Hazardous waste .....	6	15	28	24	27	3.5
Secondhand smoke .....	11	12	27	24	26	3.4
Carbon monoxide poisoning in homes .....	7	19	36	19	19	3.2
Food poisoning .....	13	21	35	14	17	3.0
Firearms .....	20	20	28	16	16	2.9
Radon in home basements .....	15	27	35	14	8	2.7

## Food Safety Issues

Although food poisoning was judged as relatively low in terms of risks to public health (in Table 5), Table 6 explores various dimensions of food safety and quality. Salmonella, E.coli, and groundwater contamination resulting from livestock manure were the three highest rated issues. Milk from bGH treated cows, use of chemical fertilizers, and genetically altered crops were the three lowest rated health and food safety issues.

## Health Insurance

Ninety-seven percent of the respondents have medical (health) insurance; however, some respondents expressed concerns about whether their medical insurance is adequate. Eighty-two percent felt their insurance was adequate, 9 percent were unsure, and 9 percent felt it was not adequate.

Health care costs ranged from \$50 to \$460,000, with the average cost at \$5,547 per year.

**Table 6. Food Safety Issues**

	Level of Concern							Mean
	No Concern		Moderate Concern			High Concern		
	1	2	3	4	5	6	7	
	----- percent -----							
Salmonella in food chain .....	3	8	12	23	18	16	20	4.7
E. coli contamination .....	3	9	13	25	17	15	16	4.6
Groundwater contamination from livestock manure .....	5	12	15	24	13	12	18	4.4
Pesticide residues in fresh fruit and vegetables .....	6	12	15	26	15	13	13	4.3
Aerial spraying of pesticides .....	6	14	16	29	13	10	13	4.1
Cholesterol/fat content .....	6	12	15	28	16	12	10	4.1
Use of insecticides .....	6	15	18	28	13	10	10	4.0
Antibiotic residues in meat and poultry .....	9	19	12	32	9	7	12	3.8
Food additives such as dyes and preservatives .....	8	19	17	27	13	8	8	3.7
Salt levels in food .....	11	21	19	26	10	7	6	3.5
Irradiation of food .....	16	18	15	26	10	7	8	3.5
Milk from cows treated with bGH/bST .....	20	19	13	20	9	8	10	3.4
Use of chemical fertilizers .....	14	22	19	26	8	5	6	3.3
Genetically altered crops .....	23	20	15	20	9	5	7	3.1

One-fourth of the respondents reported health care costs (including medical insurance premiums) less than \$2,400, the second quartile costs were from \$2,500 to \$4,000, the third quartile included costs from \$4,001 to \$5,900, and the fourth quartile included costs from \$5,901 to \$460,000.

### Health Status

One-fourth of the respondents reported that someone in their household has a health condition that is the result of environmental borne toxins or pollutants such as an allergy to pollen, smoke, or dust. Of the 509 households reporting such a health condition, nearly three-fourths (73 percent) indicated it was an occasional problem, and 27 percent reported it as a chronic problem. As a follow-up, 103 respondents reported the condition was serious enough to result in lost days from work or school in the past year. The average days missed from work or school was 23 days.

### Farm Accidents

#### Incidence of accidents and injuries

Seventeen percent of the respondents reported at least one minor farm accident or injury occurred on their farm during the past year that required medical attention at home.

Eleven percent reported there had been a serious accident or injury on their farm in the past 12 months that required medical attention at a doctor's office or hospital.

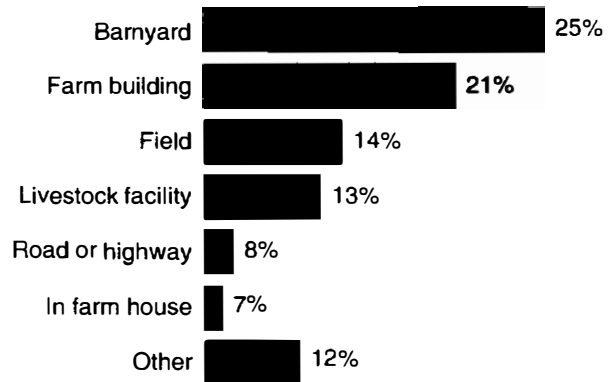
Respondents were asked to describe the most serious farm accident that occurred on their farm in the past 12 months. Nearly two-thirds (62 percent) of the accidents involved the farm operator, while children were involved in 14 percent of the accidents or injuries, and spouses were involved in 11 percent of the accidents (Table 7).

One-fourth of the accidents occurred in barnyards, and one-fifth (21 percent) occurred in farm buildings, although 13 percent occurred in livestock facilities (Figure 1.)

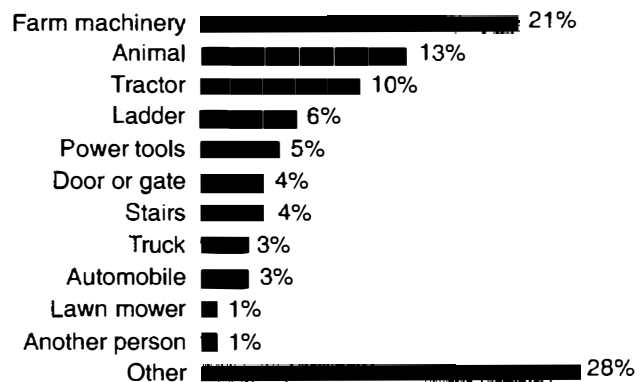
Figure 2 shows the wide array of things that caused the accidents. The major causes are

**Table 7. Victims of Farm Accidents and Injuries that Required Medical Attention**

	<u>Number</u>	<u>Percent of Total</u>	<u>Average Age</u>
Farm operators .....	493	62	49.3
Child .....	109	14	12.7
Spouse .....	87	11	52.5
Other family member	47	6	43.7
Employee .....	41	5	35.9
Other .....	17	2	36.7
Total .....	794	100	



**Figure 1. Where did the accidents or injuries occur?**

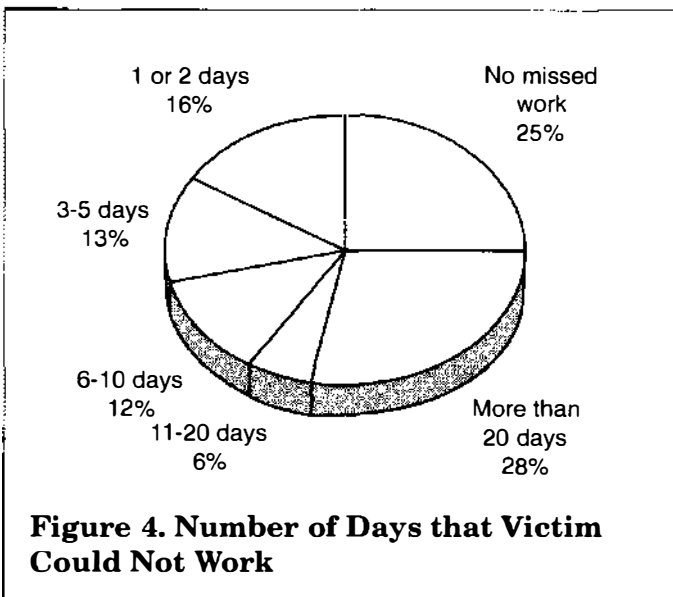
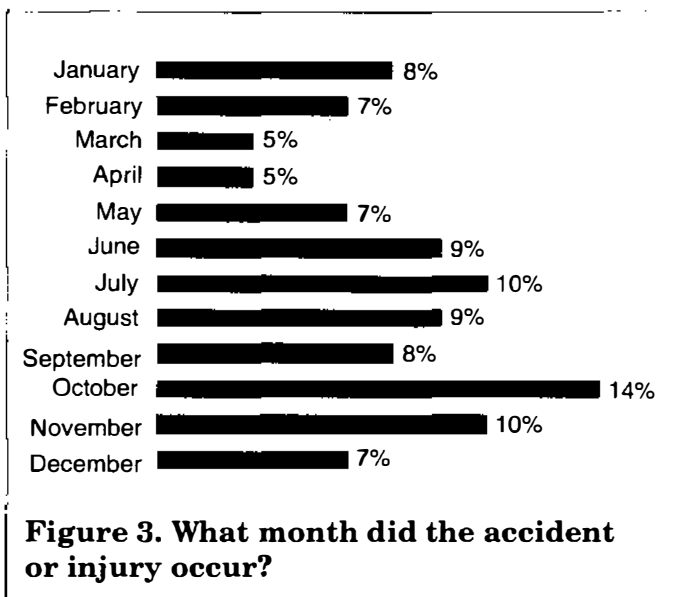


**Figure 2. What was involved in the accident or injury?**

machinery, animals, and tractors, although the miscellaneous "other" category accounted for 28 percent.

Farm accidents occur throughout the year as shown in Figure 3, although October stands out as a particular accident prone month.

Figure 4 shows the number of days that victims could not work as a result of injuries.



## Perceptions of Well-being

Table 8 provides five indicators of respondents' perceptions about themselves and their communities. Fifty-one percent felt they are better off now than five years ago, 40 percent felt they are about the same, and nine percent indicated they are worse off than five years ago. Fifty-three percent felt they are better off than their parents were when they were the same age, although 18 percent felt they were worse off than their parents.

**Table 8. All things considered . . .**

	<b>Better Off</b>	<b>About The Same</b>	<b>Worse Off</b>
	----- percent -----		
Do you think you are better off or worse off than you were 5 years ago? .....	51	40	9
Do you think you are better off or worse off than your parents when they were your age? .....	53	29	18
Is your community better off or worse off than 5 years ago? .....	23	52	25
Do you think you will be better off or worse off 5 years from now? .....	38	52	10
Do you think your community will be better off or worse off in 5 years? .....	17	57	26

One-fourth felt their community was better off than five years ago, 52 percent felt their community was about the same, and one-fourth felt their community was worse off.

In terms of the future, 38 percent think they will be better off in the next five years, 52 percent do not expect any change, and 10 percent indicated they will likely be worse off. Respondents were quite divided over the future prospects of their communities—17 percent indicated their community would be better off, 57 percent did not expect any change, but 26 percent felt their community would be worse off.

## Job Satisfaction

Table 9 displays several commonly used measures of job satisfaction. The items are presented in descending order for ease of illustration. The level of satisfaction ranges from 93 percent agreement with the statement, "I am proud of the work I do on the farm," to 68 percent agreement that "I have many options in the way I do my farm work." Across the nine items, respondents expressed high levels of job satisfaction and personal well-being.

## Perceived financial situation

Eighteen percent report that their financial situation is "much better" than five years ago, and 42 percent reported they were somewhat better off than five years ago. Nearly 1 in 4 (26 percent) reported their financial situation had

stayed the same during the past five years, 11 percent reported they are somewhat worse off, and 3 percent reported they were much worse off than five years ago.

## Stress Levels and Work Satisfaction

Table 10 compares stress levels among respondents in 1997 and 1986. Overall, there has been an improvement in stress levels among farm families during the past 11 years. For example in this year's survey, 12 percent reported being upset fairly or very often in the last month, compared with 21 percent in 1986. In the latest poll, 13 percent indicated they were unable to control important things in their life, compared to 24 percent in 1986. Feeling nervous and stressed declined from 31 percent in 1986 to 19 percent this year. Across each of the 14 stress measures, there was an improvement between the 1986 and 1997 surveys.

**Table 9. Job Satisfaction**

	<u>Strongly Agree</u>	<u>Agree</u>	<u>Uncertain</u>	<u>Disagree</u>	<u>Strongly Disagree</u>
	----- percent -----				
I am proud of the work I do on the farm .....	33	60	6	1	0
I feel competent to deal with life's difficulties .....	19	67	13	1	0
The person I am closest to emotionally respects my feelings .....	23	59	14	3	1
I enjoy finding new ways to do my farm-related work .....	16	65	16	2	1
My ideas are listened to in family discussions .....	17	62	17	3	1
I feel appreciated by people I am close to for what I contribute to the farm .....	17	62	16	4	1
Professionals and service people with whom I interact respect me as a farmer .....	13	60	23	3	1
The person closest to me and I agree on future goals .....	13	60	21	5	1
I have many options in the way I do my farm work .....	9	59	19	12	1



**Table 10. Assessments of Quality of Life**

*In the last month, how often have you:*

		<u>Never</u>	<u>Almost Never</u>	<u>Sometimes</u>	<u>Fairly Often</u>	<u>Very Often</u>
		----- percent -----				
Been upset because of something that happened unexpectedly	1997	8	29	51	10	2
	1986	7	22	50	16	5
Felt that you were unable to control the important things in your life	1997	14	36	37	10	3
	1986	15	26	35	17	7
Felt nervous and stressed	1997	8	29	44	15	4
	1986	8	21	40	21	10
Dealt successfully with irritating life hassles	1997	3	7	32	46	12
	1986	3	7	41	40	9
Felt you were effectively coping with important changes occurring in your life	1997	2	5	30	50	13
	1986	2	5	41	42	10
Felt confident about your ability to handle your personal problems	1997	2	4	20	53	22
	1986	2	4	29	46	19
Felt that things were going your way	1997	2	6	38	44	10
	1986	3	15	51	25	6
Found you could not cope with all the things you had to do	1997	16	42	31	9	2
	1986	17	38	34	9	2
Been able to control irritations in your life	1997	2	5	28	50	15
	1986	2	5	33	47	13
Felt you were on top of things	1997	2	5	29	49	15
	1986	3	12	37	37	11
Been angered because of things that happened that were outside of your control	1997	7	27	47	15	4
	1986	6	18	44	22	10
Found yourself thinking about things you have to accomplish	1997	1	4	33	43	19
	1986	1	4	35	41	19
Been able to control the way you spend your time	1997	1	5	34	48	12
	1986	1	5	32	47	15
Felt difficulties were piling up so high you could not overcome them	1997	22	46	27	4	1
	1986	23	37	30	7	3

*Questions are from a study reported by Sheldon Cohen, Tom Kamstick, and Robin Mermelstein, The Journal of Health and Social Behavior, 1983, Vol. 24 (Dec.):385-396.*

## Who Will Benefit from New Technology

Respondents were asked to check which of the following groups would benefit from each new technology (Table 11). Because respondents could check any number of groups that would benefit, the number of responses varies for each item. For bovine somatotropin, 31 percent indicated that large farms would benefit, 24 percent felt that all farms would benefit, 22 percent felt agribusiness would benefit, and 17 percent felt that consumers would benefit from this technology.

Most respondents did not see these technologies specifically benefiting small farms. Across the 10

technologies or programs, less than 5 percent indicated that small farms would benefit. Likewise, there were no technologies that were viewed as specifically beneficial to midsize farms. Yield monitors, closed membership cooperatives, and confinement livestock facilities were viewed by about 10 percent of the respondents as benefiting mid-sized farms. Large farms were viewed as major benefactors of global positioning systems (51 percent), confinement livestock facilities (44 percent), and yield monitors (42 percent). Bt corn (48 percent), herbicide tolerant soybeans (47 percent), the 1996 Farm Bill (38 percent), and personal computers (37 percent) were judged as technologies or programs that would benefit all

**Table 11. Who do you think will benefit from the following new developments?**

	<u>Small Farms</u>	<u>Mid-Size Farms</u>	<u>Large Farms</u>	<u>All Farms</u>	<u>Con- sumers</u>	<u>Agribusi- ness</u>
	----- percent -----					
Bovine somatotropin (bGH or bST) .....	1	5	31	24	17	22
Herbicide tolerant soybeans .....	2	6	14	47	9	22
Global positioning systems (precision farming) .....	4	6	51	12	5	26
Yield monitors .....	1	12	42	24	3	18
Personal computers .....	2	8	21	37	12	20
Confinement livestock facilities .....	1	9	44	15	11	20
Value-added processing .....	2	5	21	29	21	22
Bt corn.....	1	5	14	48	9	23
Closed membership cooperatives (value- added cooperatives) .....	4	10	29	29	9	19
1996 Farm Bill (Freedom to Farm) .....	2	6	19	38	17	18

farms. Consumers were viewed as the major beneficiaries of valued added processing (21 percent), the 1996 Farm Bill (17 percent), and bovine somatotropin (17 percent). Agribusiness was viewed as benefiting from these technologies by one-fifth to one-fourth of the votes cast.

### Off-farm Employment

Thirty-five percent of the farm operators and 51 percent of the farm spouses reported working off the farm in 1996 (Table 12). Among operators reporting off-farm work, they average about 37 hours per week, and work an average of 43 weeks per year. Many of the operators have combined farming with off-farm employment for a number of years. The average length of off-farm employment was 18 years, and the average distance traveled one way to the off-farm job was 17 miles.

Farm spouses work an average of 34 hours per week in their off-farm jobs, and work an average of 46 weeks per year. Unlike the operators, they have worked slightly less years in their off-farm jobs averaging 14 years, and driving an average of 12 miles one way to their jobs.

For those reporting they do not work off the farm, the survey asked if they would like an off-farm job. Twelve percent of the farm operators and 17 percent of the spouses indicated they would like an off-farm job. Among the operators indicating they would like an off-farm job, they would like to work an average of 28 hours per week, and were willing to travel an average of 19 miles. Among spouses indicating they would like an off-farm job, they indicated a preference for an average of 25 hours per week, and expressed a willingness to travel 16 miles.

**Table 12. Off-Farm Employment**

	<b>Operator (N=2,103)</b>	<b>Spouse (N=1,941)</b>
Are you employed off-the-farm .....	35% Yes	51% Yes
Average hours worked off-farm per week .....	37 hours	34 hours
Average number of weeks worked off-farm per year .....	43 weeks	46 weeks
How many years have you held this off-farm job (average) .....	18 years	14 years
How many miles do you travel to this job (one way) (average) .....	17 miles	12 miles
<b>If you are not currently working off-the-farm:</b>		
Would you like an off-farm job .....	12% Yes	17% Yes
How many hours per week would you like to work (average) .....	28 hours	25 hours
How far would you be willing to travel (one way) for an off-farm job (average) .....	19 miles	16 miles

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**B** File: Communities 9-3

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