

# **CEDAR COUNTY, NEBRASKA LOCAL MARKET LABOR SURVEY**

by

**Nebraska Department of Economic Development  
November 2002**

## **CEDAR COUNTY, NEBRASKA, LOCAL MARKET LABOR SURVEY**

### **Executive Summary**

The Nebraska Department of Economic Development assisted Cedar County with the conduct of a local labor survey in October 2002. The principal findings of that survey were:

- 510 households in Cedar, Knox, Dixon, and Wayne Counties in Nebraska and Yankton County, South Dakota, responded to the survey.
- The typical household in that labor market area had 2.1 working-age persons of which 1.6 persons were employed full-time, part-time or self-employed and 0.5 were unemployed. Eighty percent of the unemployed persons were retired.
- Seventy percent of employed household members commute a mile or more to work. Over sixty percent have employer-paid health insurance and paid vacation.
- Fifty-seven percent of respondents reported more than 12 years of schooling.
- Almost forty percent of employed household members would consider applying for announced new job openings in Cedar County. They would require an average wage of \$11.61 per hour to accept a new job and a large majority would commute at least 16 miles for an acceptable new job.
- Up to 5,400 persons in the Cedar County labor market area would consider applying for new job openings in the County.
- The most common occupational skills possessed by potential job applicants were computer software (up to 2,800 persons), clerical (up to 2,100 persons), and management (up to 2,000 persons) skills.
- Less than twenty percent of employed Yankton, South Dakota, respondents would consider applying for a new job opening in Cedar County.

The results of the Cedar County Local Labor Market Survey suggest there is an adequate number of skilled workers in the area to meet the employment needs of any likely new or expanding employer. The conduct of that survey also demonstrated the commitment of Cedar County communities to local economic development.

## **CEDAR COUNTY, NEBRASKA, LOCAL MARKET LABOR SURVEY**

When recruiting new businesses or assisting with the expansion of an existing one, local government officials and economic developers are often asked whether there is sufficient local labor to supply the new or expanding business. Existing labor force information from the Census Bureau or the department of labor often does not address that question to the satisfaction of a new or expanding business.<sup>1</sup>

One option available to communities to address that question is to conduct a local labor survey. The Nebraska Department of Economic Development (NDED) has developed a labor survey methodology that local economic development organizations can follow to conduct such surveys.<sup>2</sup> The methodology relies heavily on local initiative and participation but, as with NDED's Business Recruitment and Expansion Survey activity, the Department compiles the survey results.

The goals of this survey were to describe the size and skills of the labor force in the Cedar County area, particularly the characteristics of those who might consider changing jobs. The following describes the conduct and results of the Cedar County local labor survey.<sup>3</sup>

### **Labor Force/Labor Market Characteristics**

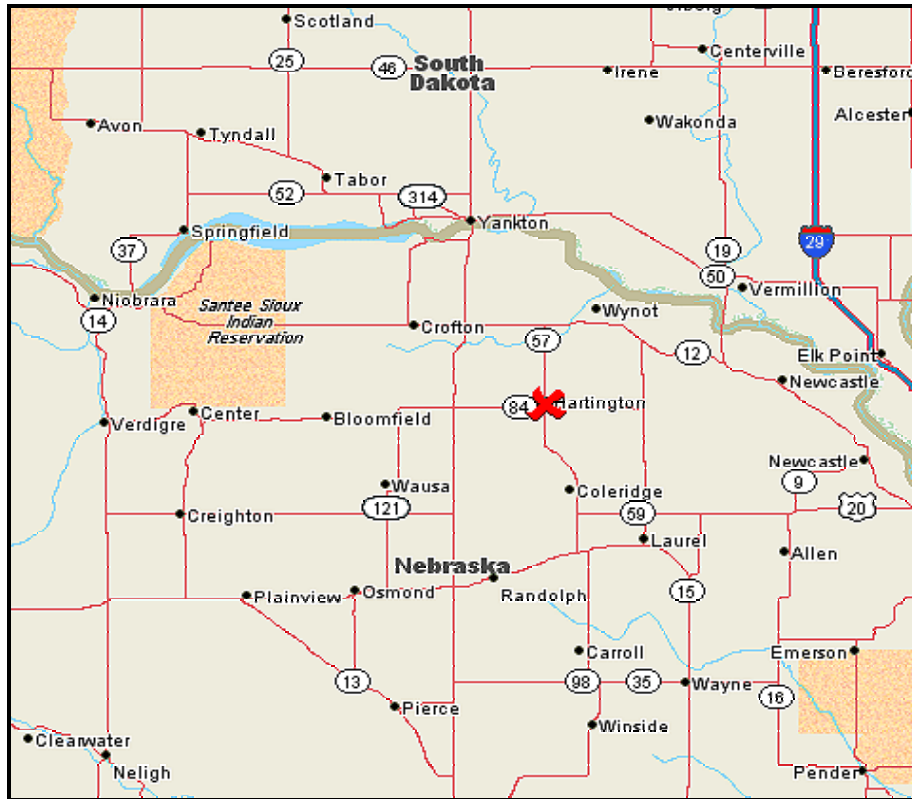
Cedar County, Nebraska, is located on the border with South Dakota (see Map 1). The largest nearby communities are Yankton, South Dakota, (20 miles from Hartington) and Wayne, Nebraska, (15 miles from Laurel; 38 miles from Hartington). It is not too surprising, then, that 2000 U.S. Census numbers show that 17.0 percent of Cedar County employed persons 16 years of age and older work outside Nebraska (see Graph 1), presumably, most in South Dakota. By way of comparison, only 2.7 percent of Yankton County workers work outside of South Dakota. Another 15.7 percent of Cedar County workers commute outside the county to jobs elsewhere in Nebraska. (Statewide, less than 20 percent of workers work in another state or county.) Thus, the Cedar County labor market area includes Yankton in addition to selected communities in and around Cedar and Knox Counties.

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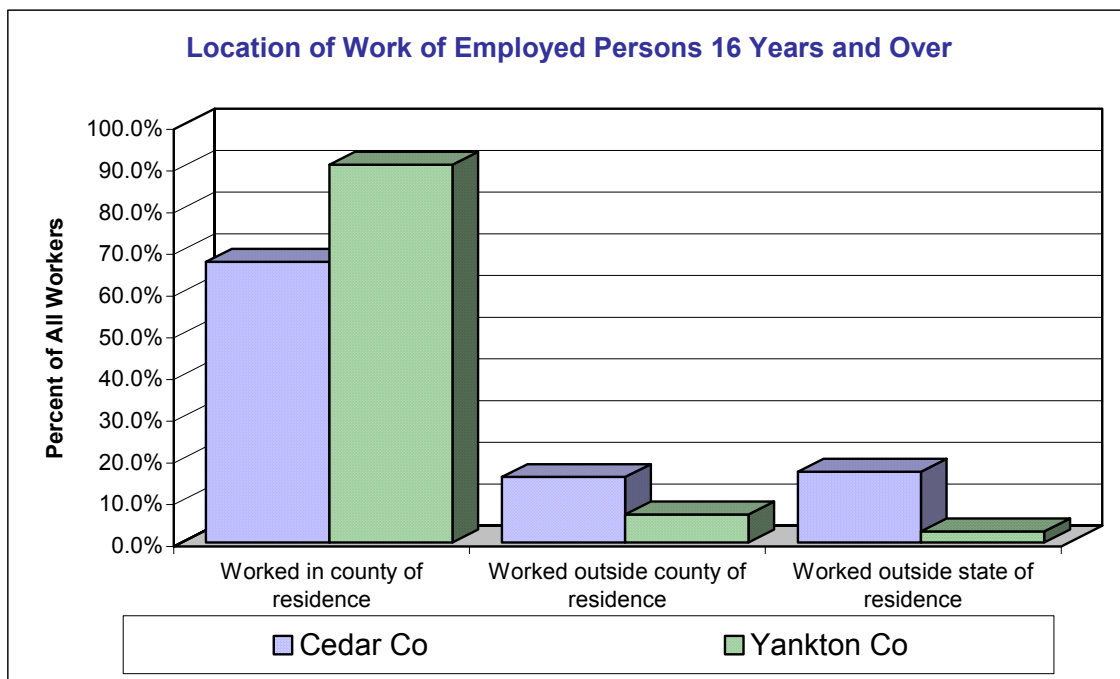
<sup>1</sup> The accuracy of Census Bureau and department of labor information is not the problem; it's the timing and specificity. Census numbers are available only every ten years and labor information is only available for counties and metropolitan communities.

<sup>2</sup> Historically, the NDED has assisted communities conduct labor surveys, income surveys, and community needs surveys by developing methodologies, providing guidance, and tabulating results.

<sup>3</sup> Knox County conducted a local labor survey almost simultaneously with Cedar County because their labor market areas share many of the same communities. Those results are reported in a separate Knox County report.



**Map 1 – Cedar County Labor Market Area**

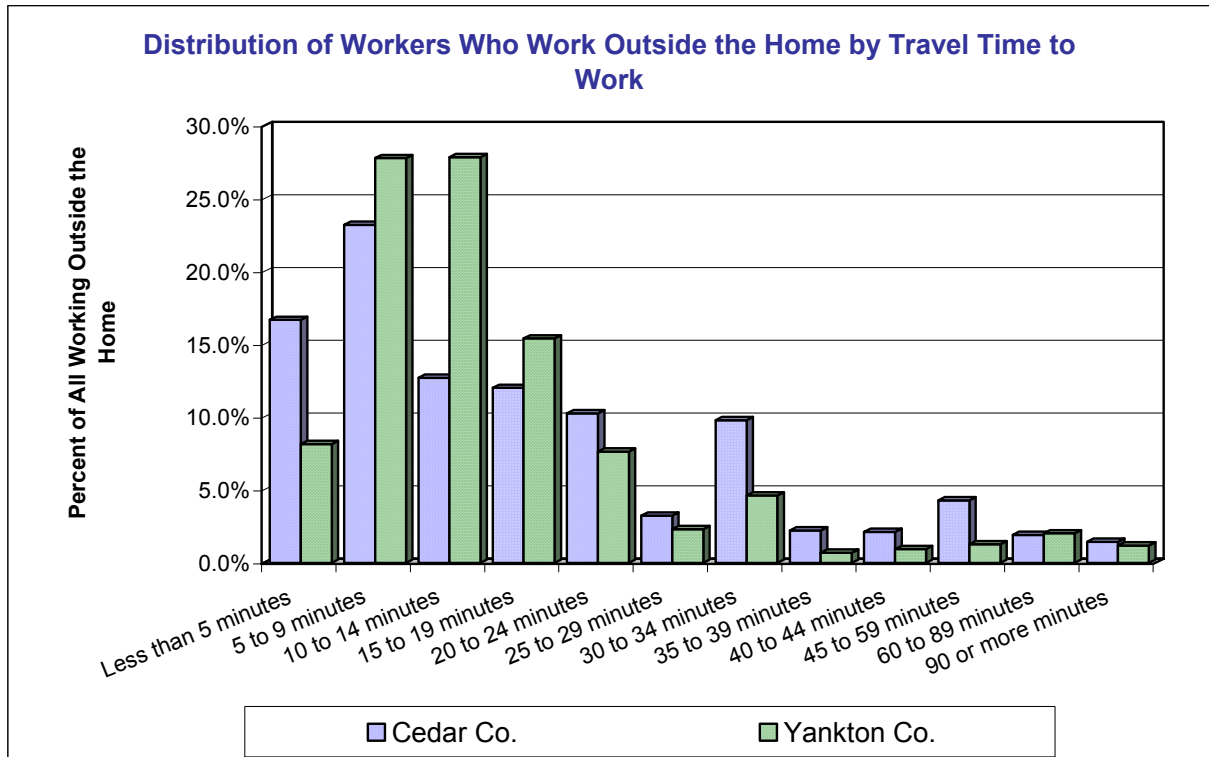


**Graph 1**

Census travel time to work numbers reflect the high percent of Cedar County workers that commuted outside the county to work. Although a higher percentage of Cedar County workers than Yankton County workers got to work in less than five minutes, higher

percentages of Yankton County workers got to work in 5 to 24 minutes, whereas higher percentages of Cedar County workers took 25 to 59 minutes to get to work (see Graph 2). That indicates Cedar County workers, as a group, traveled farther to their jobs than the typical worker across the border.

Those facts suggested to Cedar County economic development organizations there might be more local labor force participants interested in acceptable new jobs within the county than might be indicated by the unemployment rate or other economic indicators. They also thought it might be possible to increase the number of South Dakota workers commuting to Nebraska, thus, the inclusion of Yankton respondents in the survey.



**Graph 2**

**Survey Methodology**

As mentioned, local economic developers in Cedar County defined the goals and scope of the survey. NDED staff members met with developers from Cedar and Knox Counties in September, 2002, to review a suggested list of communities and a draft questionnaire. The conferees agreed on the communities to be included in each county's survey and on the questionnaire. Developers from both counties thought it important to include particular South Dakota communities in their surveys. A difference between this local labor survey methodology and many such past surveys was that this was a telephone survey. That approach allowed the random selection of respondents and some statistical analysis of the results. It also complicated the conduct of the survey – you needed a telephone bank and a number of interviewers. Cedar County developers made arrangements for a telephone bank and recruited the volunteer

interviewers.<sup>4</sup> The interviews were conducted October 1-3 & 5, 2002, with NDED staff attending each interview session to provide training and organizational assistance.

## Survey Results

The survey questionnaire was divided into four parts. The first and last parts were completed by all respondents; the second was completed by respondent households with an employed household member 16 years of age or older; and the third part was completed by households with an unemployed household member. The following discusses the results.

Before that, however, we need to discuss the respondent selection methodology. Twenty-one Nebraska communities plus Yankton, South Dakota, were selected for the Cedar County labor market survey. Statistically, the household population of those 22 communities can be represented by a random sample of less than 400 respondents. However, if 400 telephone numbers were randomly selected from all the numbers in those communities combined, most of the selected numbers would be from Yankton, since it is far and away the largest community in the region. In order to insure, all 22 communities were included, a sample was drawn from telephone directories for each Nebraska community based on its proportion of the total number of households in all the Nebraska communities.<sup>5</sup> It was arbitrarily determined that 75 random respondents could adequately represent Yankton.<sup>6</sup>

With a total of 510 Nebraska and South Dakota respondents, the overall response rate by Nebraskans to the Cedar County labor market survey was 49.1 percent. That is an excellent response rate for a mail survey, but possibly somewhat low for a telephone survey.<sup>7</sup> That rate represents the number of respondents who completed the survey divided by the sum of the number responding plus those who refused to participate. The actual number of telephone numbers called was substantially higher, since it also included respondents who did not answer the telephone and disconnected numbers (about ten percent of all numbers selected). Thus, the interviewers called four different telephone numbers for every completed survey.

### Respondent Household Characteristics

Because those surveyed were randomly selected and because all respondents completed the first section of the survey, the results reported in this section should be representative of all households in the survey area.<sup>8</sup> The survey results suggest the typical

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<sup>4</sup> In the first of these NDED local labor surveys, local developers in Fullerton hit on the idea of using high school students as the volunteer interviewers. That proved to be so successful that every community since has used high school student volunteers as the interviewers. In Cedar County, students from four different high schools volunteered.

<sup>5</sup> Actually, to insure that Cedar and Knox County communities were adequately represented in the final results, e.g., to insure that Wayne did not dominate the Cedar County results, Cedar and Knox County communities were given a weight of 1.0 in determining the sample proportions and non-Cedar/Knox County Nebraska communities were given a weight of 0.5 in drawing the Nebraska sample.

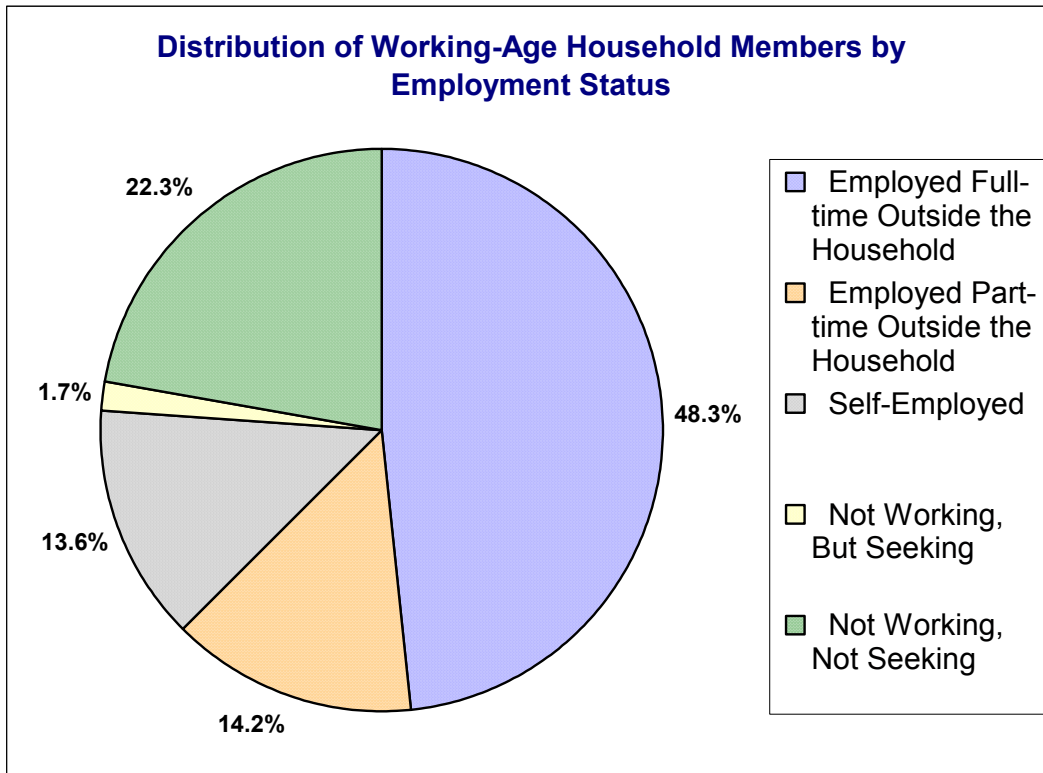
<sup>6</sup> There was no statistical basis for selecting 75. A stand-alone survey of Yankton would require several hundred respondents. Conducting that many additional telephone interviews simply was not feasible using volunteer interviewers and a donated telephone bank.

<sup>7</sup> The response rate was low but was consistent with previous local labor surveys, suggesting there was nothing untoward about the timing or content of this survey.

<sup>8</sup> Actually, the responses to all sections should be representative of the population but, because all respondents completed Parts 1 and 4, the margin of error is less for those Parts than for Parts 2 and 3.

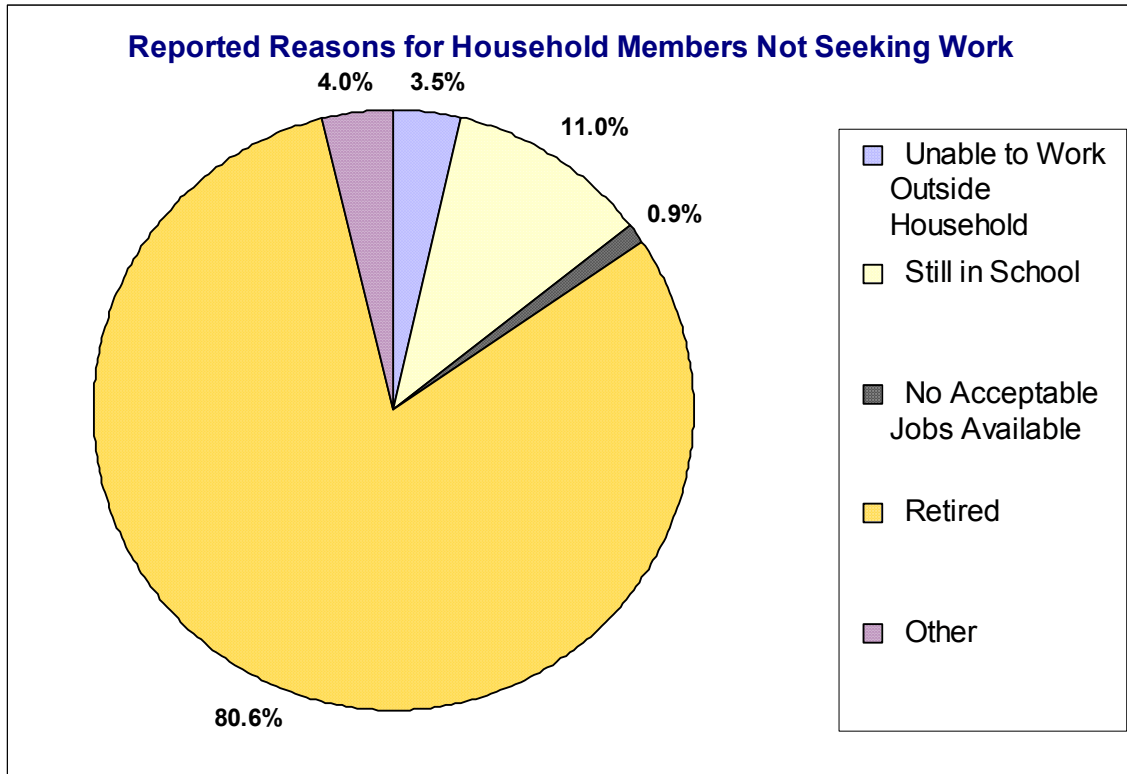
household in the Cedar County labor market area includes 2.1 persons 16 years of age or older (see Appendix Table 1). Of the total working-age household members, 48.3 percent were employed full-time outside the household and 14.2 percent were employed part-time (see Graph 3). Almost fourteen percent were self-employed and 22.3 percent were unemployed and not seeking work.

Most (80.6 percent) of the unemployed, not seeking work were retired (see Graph 4). Eleven percent were still in school and 3.5 percent were unable to work outside the household. By definition, that included those with a disability or family responsibilities that precluded entering the labor market. So, although there is some possibility of expanding the labor force by recruiting the currently unemployed, there was not a lot of slack in that category in the Cedar County area.<sup>9</sup>



**Graph 3**

<sup>9</sup> Other researchers have concluded most employers hire new employees largely from the ranks of the currently employed (see Trevor Steinert and Brett Zollinger, "Great Bend Labor Availability Analysis," The Docking Institute for Public Affairs, 2001).



**Graph 4**

**Employed Household Members Characteristics**

About a quarter of the employed household members in respondent households were employed in more than one job (see Appendix Table 2). Sixty-nine percent of employed household members drove a mile or more to work.<sup>10</sup> The average commute for those driving to work was 12.9 miles. Not surprisingly, employed respondents lived in a larger number of communities than they worked in (see Graph 5), that is, the largest communities included in the labor market area, Hartington, Wayne, and Yankton, represented a higher percentage of reported work locations than they did residence locations.<sup>11</sup>

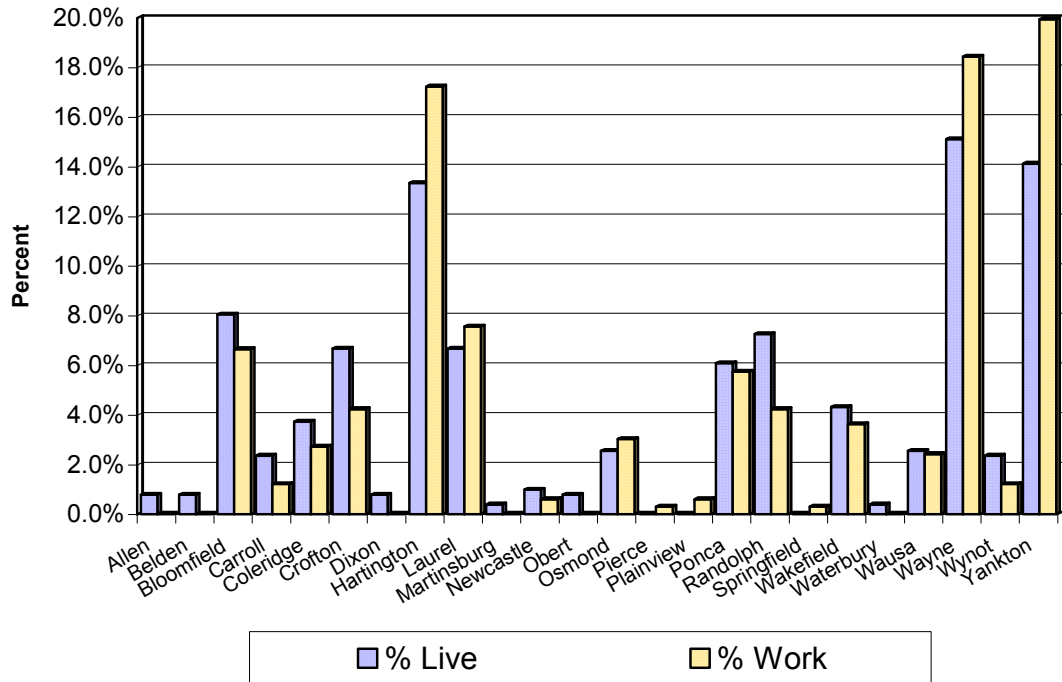
The largest number, or percentage (26.8 percent), of employed household members was employed in the agricultural industry (see Graph 6). The other dominant industries for employment were service (14.5 percent), government (13.5 percent), and manufacturing (10.1 percent). Respondents reported employed household members had been in their current job an average of 15.8 years. Twenty-three percent of employed household members performed “professional” and 24.2 percent “skilled” work. Sales (13.1 percent), semi-skilled (11.5 percent), and clerical (10.9 percent) were the other types of work most commonly performed. Finally, 65.1 percent of employed respondents had employer-provided health insurance and 62.5 percent received paid vacation.

<sup>10</sup> We know those that commuted to work drove because the Census reported that no Cedar County workers used public transportation to get to work and only 5.9 percent walked.

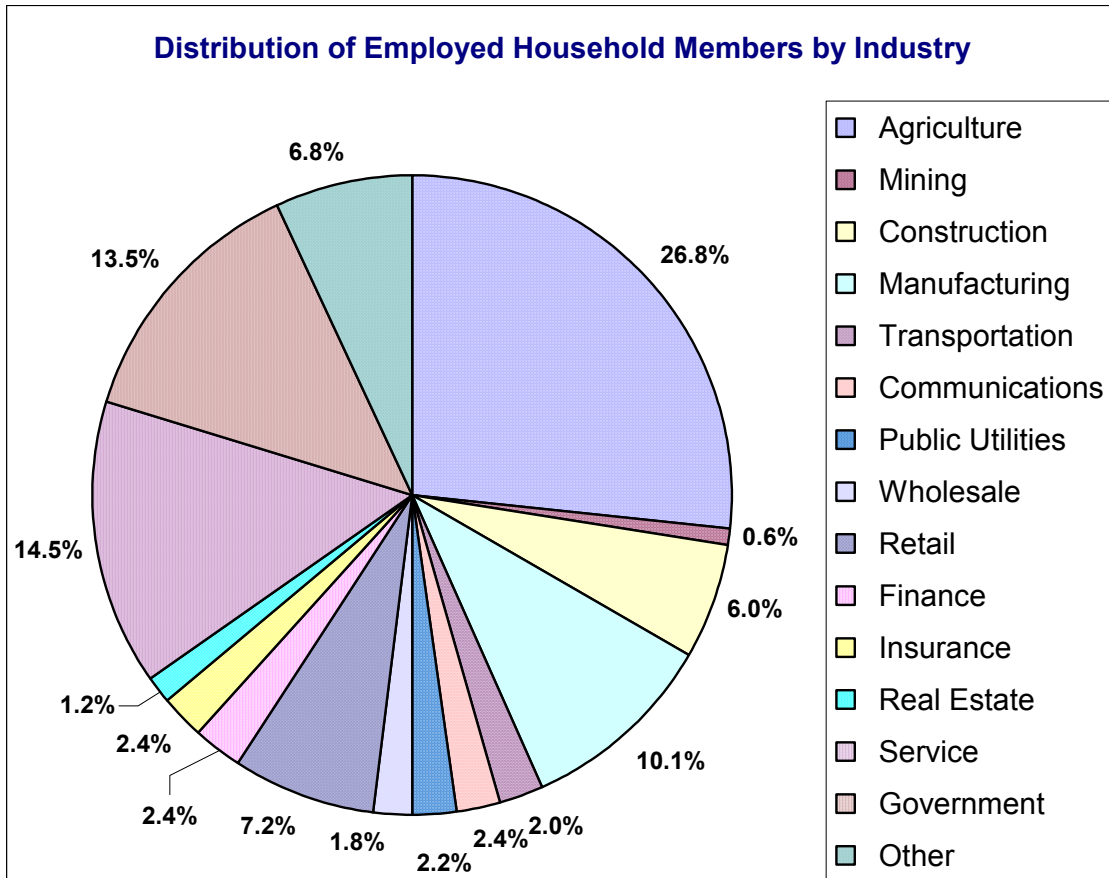
<sup>11</sup> About fifteen percent of respondents reporting a work location reported a household member working in a community not included in the labor market area, for example, Sioux City, South Sioux City, Norfolk, etc.



### Distribution of Employed Household Members by Where They Live and Where They Work



**Graph 5**

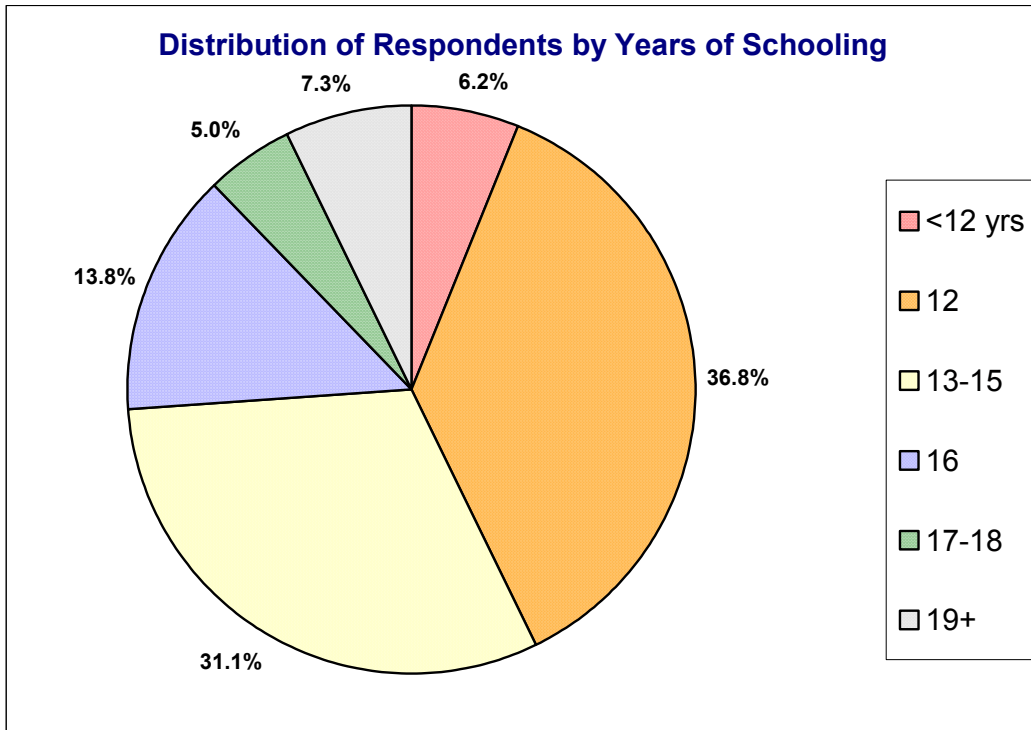


**Graph 6**

#### Respondent Characteristics

There were slightly more male respondents (51.0 percent) than female respondents (49.0 percent) (see Appendix Table 4). The average age of the respondents was 53.6 years, but the mode, or most common age reported, was 44.0 years. So, as a group, the respondents were comparatively young. The respondents were also fairly well educated. Most (57.2 percent) reported more than 12 years of schooling (see Graph 7). Fourteen percent reported 16 years of schooling and 12.3 percent reported more than 16 years. Seven percent of respondents reported they were fluent in a language other than English.

Finally, respondents were asked whether they had lived outside the Cedar County area. Given that Yankton, South Dakota, was included in the survey, it was not surprising that 64.7 percent reported they had. Nor was it surprising that 47.3 percent of those that reported living elsewhere reported living outside of Nebraska. About half of those living outside of Nebraska had lived in Yankton, meaning that half had lived elsewhere. Other locations included Iowa, Missouri, Montana, California, Alabama, Minnesota, and Texas.



Graph 7

### Potential Job Applicant Numbers and Characteristics

As noted, the currently unemployed probably do not represent a significant source of potential applicants for new jobs. In this case, that was because most of those individuals were retired (see Appendix Tables 1 and 3). Still, it is useful to note that the unemployed reported as willing to apply for new job openings (14.5 percent of the total unemployed) would require an average of \$9.44 per hour to accept such a job and that 57.6 percent would commute at least 16 miles for a new job.

Of employed household members, 39.8 percent reported they would apply for a new job in the Cedar County area (see Appendix Table 2). They would require an “average” wage of \$11.61 per hour<sup>12</sup> and 71.9 percent would commute at least 16 miles for such a job. The required wage rate and the percentage willing to commute 16 or more miles were substantially higher for the employed than for the unemployed. That is logical -- the unemployed would likely be willing to accept a comparatively low wage and most of the employed are already commuting some distance, so they would likely be willing to commute a greater distance for what would presumably be higher wages.

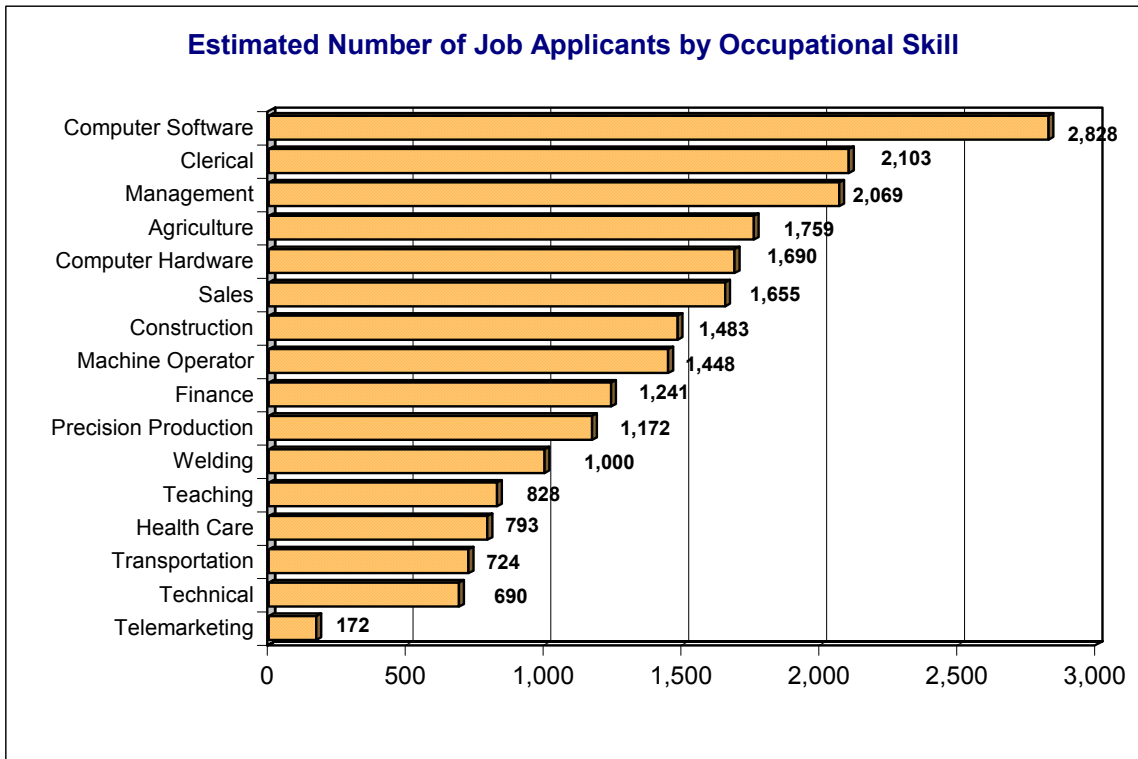
There were approximately 17,600 residential telephone numbers in the directories for the communities in the Cedar County labor market area. That suggests that the 510 households that responded to the survey represented 2.9 percent of all households in the labor market area<sup>13</sup> or that the 1,046 household members 16 years or older reported for

<sup>12</sup> Actually, this average is an under-estimate because the respondents were allowed to select a category “\$15 or more.” \$15 was used in calculating the average but many respondents in that category probably had in mind an hourly wage rate greater than \$15 per hour.

<sup>13</sup> (510 divided by 17,600 = .029) That is a low proportion compared to previous local labor surveys. The reason is because Yankton represented almost 40 percent of the survey households but only 14 percent of the

those households represented 2.9 percent of all working-age persons in the area. So, if the 159 employed household members reported as willing to apply for a new job also represented 2.9 percent of all such persons, then up to an estimated 5,480 working-age persons in the Cedar County labor market area were willing to consider applying for a new job.<sup>14</sup>

The potential number of job applicants by occupational skill in the Cedar County labor market area can be estimated using the same methodology. Specifically, that method led to an estimate that there were up to 2,800 persons with computer software skills willing to consider applying for a Cedar County job (see Graph 8).<sup>15</sup> Other leading skill categories were clerical (2,100 potential applicants), management (2,000), agriculture (1,750), computer hardware (1,700), and sales (1,600).<sup>16</sup>



**Graph 8**

Estimating the number of applicants for new jobs by wage rate provides another perspective on the Cedar County labor market. The number of potential applicants jumps geometrically from \$7.00 to \$10.00 per hour, suggesting marginal increases in offered wages would dramatically increase the size of the labor pool at those levels. From \$12.00 to

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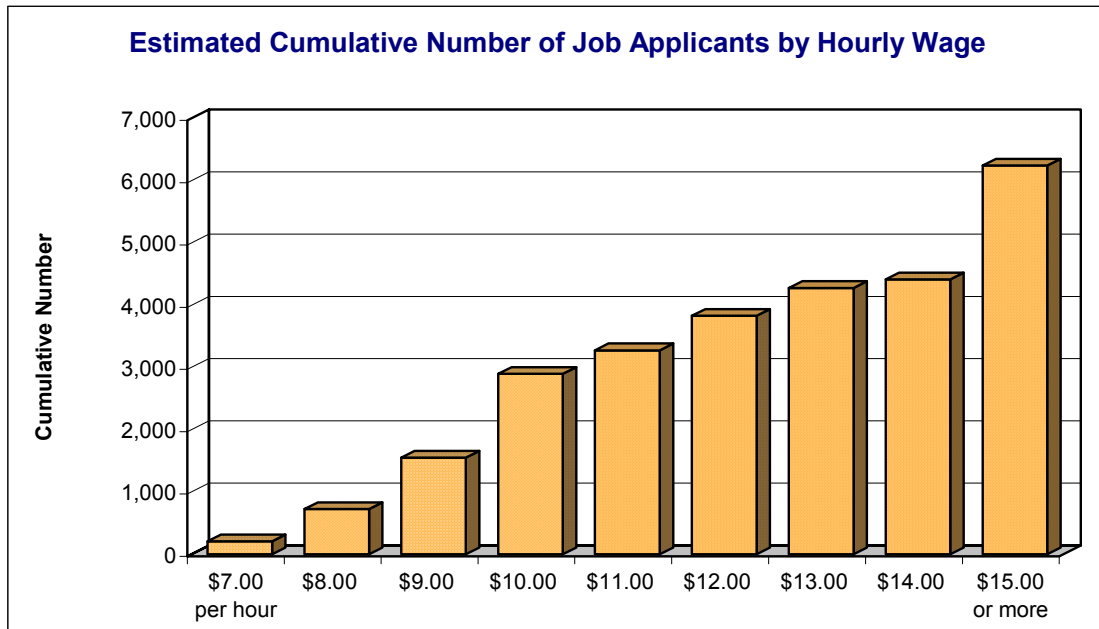
completed surveys. If Yankton is not included, the proportion becomes 0.041, a figure more in line with past surveys.

<sup>14</sup> As suggested, the inclusion of the Yankton surveys somewhat skews this extrapolation. If those surveys are dropped, the number of potential applicants falls to 3,561.

<sup>15</sup> These were self-reported skills, that is, respondents were not asked for verification that the household members possessed the reported skills.

<sup>16</sup> See Appendix Table 5 for a comparison of estimated potential job applicants by skill including and not including the Yankton surveys.

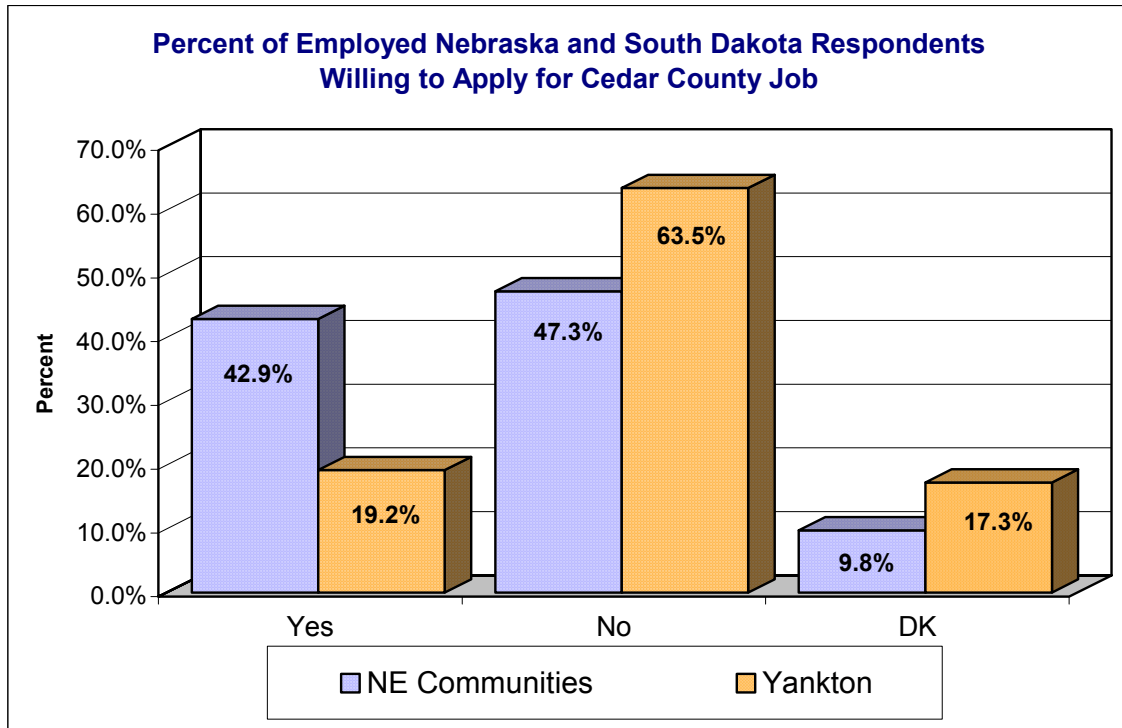
\$14.00 per hour, marginal increases would have a smaller effect. The jump from \$14.00 to \$15.00 or more per hour would again dramatically increase the number of applicants (because it really represents more than a \$1.00 per hour jump – see footnote #12).



**Graph 9**

Finally, we need to look at the issue of the interest of Yankton residents in applying for new job openings in Cedar County. The survey results tend to uphold the Census figures cited earlier – less than twenty percent of employed Yankton household members would consider applying for a job opening in Cedar County (see Graph 10). Compared to that, 42.9 percent of employed household members from the Nebraska communities would consider applying.<sup>17</sup> The only positive aspect of this comparison for potential Cedar County employers was that a significantly higher percent of Yankton respondents were undecided, suggesting they might be persuaded to consider a job opening in Cedar County.

<sup>17</sup> Chi-square analysis of this Nebraska-Yankton comparison shows a statistically significant difference in the responses of Nebraska and Yankton respondents. Specifically, considerably fewer Yankton respondents than expected answered “yes” to the question “Would they apply for a new job opening in Cedar County?”



**Graph 10**

**Conclusion**

The Nebraska Department of Economic Development assisted Cedar County communities conduct a local labor market survey in October 2002. That random sample telephone survey resulted in a total of 510 completed surveys, including 72 from Yankton, South Dakota. The results suggested there were up to 5,400 employed working-age persons in the labor market area who would consider applying for new job openings in Cedar County. Those individuals have a variety of occupational skills, the most common being computer software, clerical, and management skills. Potential employers would likely have to offer \$10.00 to \$11.00 per hour and health insurance and paid vacation to generate an adequate number of applicants.

In addition to suggesting the Cedar County labor market includes enough potential job applicants to satisfy the needs of any likely new employer,<sup>18</sup> the ability of Cedar County communities to organize to conduct this survey illustrated their commitment to local economic development.

**APPENDIX TABLES**

**Table 1. Household Characteristics - Cedar County**

Characteristic	Number/Value	Percent
Number of Households Completing Survey	510	NA

<sup>18</sup> As noted, the inclusion of the Yankton surveys inflates the projected number of total potential job applicants and of applicants by skill but, as shown in Appendix Table 5, even if the Yankton surveys are excluded there are still adequate numbers of potential applicants. Nonetheless, an actual employer hiring new workers would likely have a different experience than suggested by this survey, because people do not always respond the way they say they would.

<b>Total Household Members 16 Years and Older</b>	1,046	NA
Average Working-Age Persons Per Household	2.1	NA

**Employment Status of Members 16 & Older:**

Employed Full-time Outside the Household	497	48.3%
Employed Part-time Outside the Household	146	14.2%
Self-Employed	140	13.6%
Not Working, But Seeking	17	1.7%
Not Working, Not Seeking	230	22.3%

**Reasons Not Seeking Work: <sup>1</sup>**

Unable to Work Outside Household	8	3.5%
Still in School	25	11.0%
No Acceptable Jobs Available	2	0.9%
Retired	183	80.6%
Other	9	4.0%

<sup>1</sup>"Reasons Not Seeking Work" may or may not equal number "Not Working, Not Seeking."  
Interviewers were instructed to allow multiple answers, so total "Reasons" could exceed total "Not Working." On the other hand, not all respondents answered every applicable question (interviewers were instructed not to pursue questions that respondents were reluctant to answer).

**Table 2. Job Interest and Skills of Employed Household Members**

Item	No./Value	Percent	Item	No./Value	Percent
<b>Would apply for job opening?</b>			<b>More Than One Job?:</b>		
Yes	159	39.8%	Yes	97	24.3%
No	197	49.4%	No	302	75.7%
Don't Know	43	10.8%	<b>Commute:</b>		
<b>Acceptable Wage:</b> <sup>1</sup>			None	121	30.3%
\$7.00 per hour	6	3.3%	Distance 1 or more miles	278	69.7%
\$8.00	15	8.3%	Average Distance		
\$9.00	24	13.3%	(miles)		
\$10.00	39	21.5%	<b>Industry Employed:</b>		
\$11.00	11	6.1%	Agriculture	133	26.8%
\$12.00	16	8.8%	Mining	3	0.6%
\$13.00	13	7.2%	Construction	30	6.0%
\$14.00	4	2.2%	Manufacturing	50	10.1%
\$15.00 or more	53	29.3%	Transportation	10	2.0%
Don't Know	0	NA	Communications	12	2.4%
Average Acceptable Wage			Public Utilities	11	2.2%
Wage	\$11.61		Wholesale	9	1.8%
<b>Acceptable One-Way Commute:</b> <sup>1</sup>			Retail	36	7.2%
Less than 5 miles	7	3.8%	Finance	12	2.4%
5-15 miles	44	24.2%	Insurance	12	2.4%
16-30 miles	96	52.7%	Real Estate	6	1.2%
31-50 miles	24	13.2%	Service	72	14.5%
Over 50 miles	11	6.0%	Government	67	13.5%
Don't Know	5	NA	Other	34	6.8%
<b>Occupational Skills:</b>			<b>Average Years in Current Job</b>		
Computer Hardware	108	7.1%	15.8		
Computer Software	180	11.9%	<b>Type of Work Performed:</b>		
Clerical	147	9.7%	Professional	114	23.4%
Precision Production	80	5.3%	Sales	64	13.1%
Sales	118	7.8%	Clerical	53	10.9%
Transportation	65	4.3%	Technical	44	9.0%
Management	144	9.5%	Skilled	118	24.2%
Machine Operator	103	6.8%	Semi-skilled	56	11.5%
Finance	93	6.1%	Unskilled	39	8.0%
Health Care	53	3.5%	Don't Know	19	NA
Technical	38	2.5%	<b>Have employer health insurance?</b>		
Welding	75	5.0%	Yes	248	65.1%
Construction	96	6.3%	No	129	33.9%
Telemarketing	11	0.7%	Don't Know	4	1.0%
Teaching	59	3.9%	<b>Have employer paid vacation?</b>		
Agriculture	143	9.5%	Yes	235	62.5%
None	18	NA	No	133	35.4%
			Don't Know	8	2.1%

<sup>1</sup> Totals in this category may exceed total responding "Yes" to "Apply for job opening." Some respondents responding "Don't Know" to that question did provide acceptable wage rates and commuting miles.



**Table 3. Job Interests and Skills of the Unemployed Household Members**

Item	No./Value	Percent	Item	No./Value	Percent
<b>Would apply for job opening?</b>			<b>Occupational Skills:</b>		
Yes	25	14.5%	Computer	10	11.8%
No	140	80.9%	Hardware	15	17.6%
Don't Know	8	4.6%	Computer Software	10	11.8%
<b>Acceptable Wage:<sup>1</sup></b>			Production	0	0.0%
\$7.00 per hour	8	29.6%	Sales	6	7.1%
\$8.00	3	11.1%	Transportation	3	3.5%
\$9.00	4	14.8%	Management	4	4.7%
\$10.00	7	25.9%	Machine Operator	5	5.9%
\$11.00	1	3.7%	Finance	6	7.1%
\$12.00	0	0.0%	Health Care	6	7.1%
\$13.00	1	3.7%	Technical	1	1.2%
\$14.00	0	0.0%	Welding	2	2.4%
\$15.00 or more	3	11.1%	Construction	2	2.4%
Don't Know	0	NA	Telemarketing	4	4.7%
(Weighted) Average Wage	\$9.44		Teaching	4	4.7%
<b>Acceptable One-Way Commute:<sup>1</sup></b>			Agriculture	7	8.2%
Less than 5 miles	3	11.5%	Don't Know	1	NA
5-15 miles	8	30.8%			
16-30 miles	9	34.6%			
31-50 miles	5	19.2%			
Over 50 miles	1	3.8%			
Don't Know	1	NA			

<sup>1</sup> Totals in this category may exceed total responding "Yes" to "Apply for job opening." Some respondents responding "Don't Know" to that question did provide acceptable wage rates and commuting miles.

**Table 4. Respondent Characteristics**

Characteristic	Number/Value Percent		Characteristic	Number/Value Percent	
	Number	Percent		Number	Percent
<b>Age:</b>			<b>Education:</b>		
Mean	53.6		8 Years of Schooling	18	3.6%
Median	44.0			3	0.6%
Mode	51.0			5	1.0%
<b>Lived Elsewhere:</b>				5	1.0%
Yes	328	64.7%		186	36.8%
No	179	35.3%		55	10.9%
				86	17.0%
Elsewhere in NE	166	52.7%		16	3.2%
Elsewhere outside NE	149	47.3%		70	13.8%
				15	3.0%
Elsewhere outside Cedar County (selectively):				10	2.0%
Military Service	4	1.2%	19 or more	37	7.3%
Yankton, SD	73	22.3%	Average	13.7	
Iowa	13	4.0%	<b>Fluent in Second Language:</b>		
South Dakota	15	4.6%	Yes	36	7.2%
Wayne, NE	49	14.9%	No	465	92.8%
Dixon County, NE	13	4.0%	<b>Gender:</b>		
Pierce County, NE	8	2.4%	Male	260	51.0%
			Female	250	49.0%

**Table 5. Estimated Applicants by Skill With and Without the Yankton, S.D., Surveys<sup>1</sup>**

	Number		Difference
	With	Without	
Telemarketing	172	98	74
Technical	690	463	227
Transportation	724	512	212
Health Care	793	537	256
Teaching	828	537	291
Welding	1,000	707	293
Precision Production	1,172	805	367
Finance	1,241	854	387
Machine Operator	1,448	1,000	448
Construction	1,483	1,024	459
Sales	1,655	1,146	509
Computer Hardware	1,690	1,073	617
Agriculture	1,759	1,244	515
Management	2,069	1,366	703
Clerical	2,103	1,415	688
Computer Software	2,828	1,878	950

<sup>1</sup> The "with" extrapolation is calculated using 0.029 and all the surveys and the "without" extrapolation using 0.041 and only the Nebraska survey communities.

A difference between this local labor survey methodology and many such past surveys was that this was a telephone survey. That approach allowed the random selection of respondents and some statistical analysis of the results. It also complicated the conduct of the survey – you needed a telephone bank and a number of interviewers. Cedar County developers made arrangements for a telephone bank and recruited the volunteer interviewers.<sup>1</sup> The interviews were conducted October 1-3 & 5, 2002, with NDED staff attending each interview session to provide training and organizational assistance.

## Survey Results

The survey questionnaire was divided into four parts. The first and last parts were completed by all respondents; the second was completed by respondent households with an employed household member 16 years of age or older; and the third part was completed by households with an unemployed household member. The following discusses the results.

Before that, however, we need to discuss the respondent selection methodology. Twenty-one Nebraska communities plus Yankton, South Dakota, were selected for the Cedar County labor market survey. Statistically, the household population of those 22 communities can be represented by a random sample of less than 400 respondents. However, if 400 telephone numbers were randomly selected from all the numbers in those communities combined, most of the selected numbers would be from Yankton, since it is far and away the largest community in the region. In order to insure, all 22 communities were included, a sample was drawn from telephone directories for each Nebraska community based on its proportion of the total number of households in all the Nebraska communities.<sup>2</sup> It was arbitrarily determined that 75 random respondents could adequately represent Yankton.<sup>3</sup>

With a total of 510 Nebraska and South Dakota respondents, the overall response rate by Nebraskans to the Cedar County labor market survey was 49.1 percent. That is an excellent response rate for a mail survey, but possibly somewhat low for a telephone survey.<sup>4</sup> That rate represents the number of respondents who completed the survey divided by the sum of the number responding plus those who refused to participate. The actual number of telephone numbers called was substantially higher, since it also included respondents who did not answer the telephone and disconnected numbers (about ten percent of all numbers selected). Thus, the interviewers called four different telephone numbers for every completed survey.

## Respondent Household Characteristics

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<sup>1</sup> In the first of these NDED local labor surveys, local developers in Fullerton hit on the idea of using high school students as the volunteer interviewers. That proved to be so successful that every community since has used high school student volunteers as the interviewers. In Cedar County, students from four different high schools volunteered.

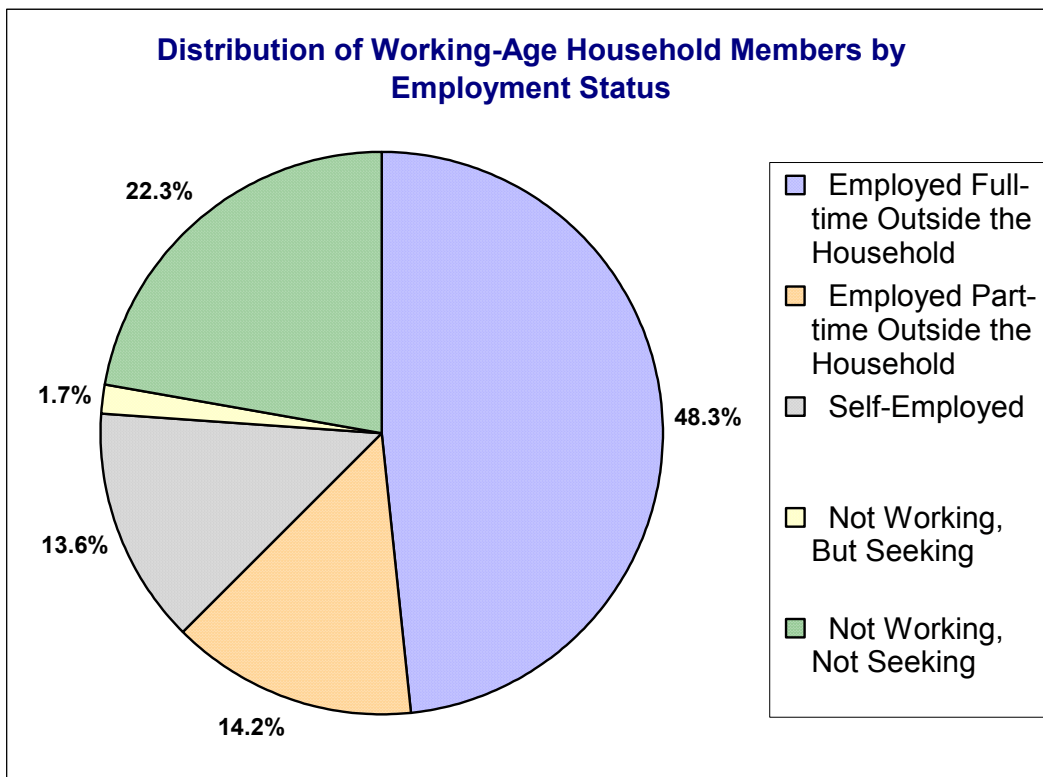
<sup>2</sup> Actually, to insure that Cedar and Knox County communities were adequately represented in the final results, e.g., to insure that Wayne did not dominate the Cedar County results, Cedar and Knox County communities were given a weight of 1.0 in determining the sample proportions and non-Cedar/Knox County Nebraska communities were given a weight of 0.5 in drawing the Nebraska sample.

<sup>3</sup> There was no statistical basis for selecting 75. A stand-alone survey of Yankton would require several hundred respondents. Conducting that many additional telephone interviews simply was not feasible using volunteer interviewers and a donated telephone bank.

<sup>4</sup> The response rate was low but was consistent with previous local labor surveys, suggesting there was nothing untoward about the timing or content of this survey.

Because those surveyed were randomly selected and because all respondents completed the first section of the survey, the results reported in this section should be representative of all households in the survey area.<sup>5</sup> The survey results suggest the typical household in the Cedar County labor market area includes 2.1 persons 16 years of age or older (see Appendix Table 1). Of the total working-age household members, 48.3 percent were employed full-time outside the household and 14.2 percent were employed part-time (see Graph 3). Almost fourteen percent were self-employed and 22.3 percent were unemployed and not seeking work.

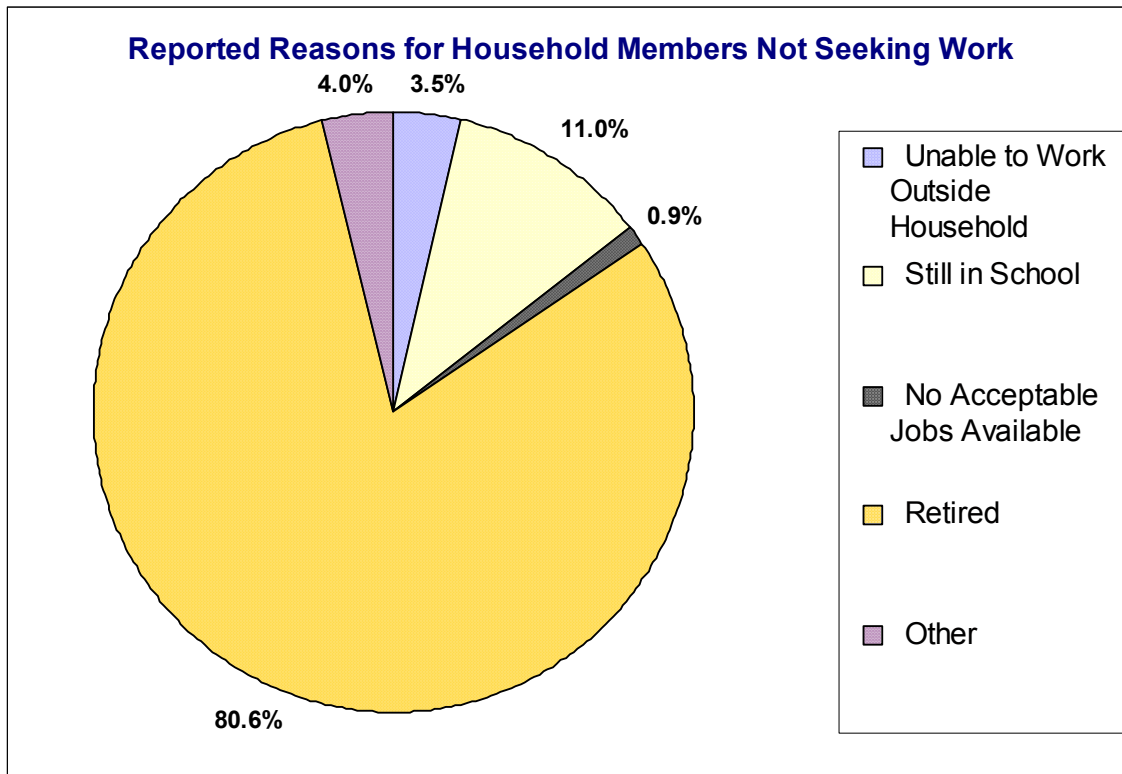
Most (80.6 percent) of the unemployed, not seeking work were retired (see Graph 4). Eleven percent were still in school and 3.5 percent were unable to work outside the household. By definition, that included those with a disability or family responsibilities that precluded entering the labor market. So, although there is some possibility of expanding the labor force by recruiting the currently unemployed, there was not a lot of slack in that category in the Cedar County area.<sup>6</sup>



**Graph 3**

<sup>5</sup> Actually, the responses to all sections should be representative of the population but, because all respondents completed Parts 1 and 4, the margin of error is less for those Parts than for Parts 2 and 3.

<sup>6</sup> Other researchers have concluded most employers hire new employees largely from the ranks of the currently employed (see Trevor Steinert and Brett Zollinger, "Great Bend Labor Availability Analysis," The Docking Institute for Public Affairs, 2001).



**Graph 4**

#### Employed Household Members Characteristics

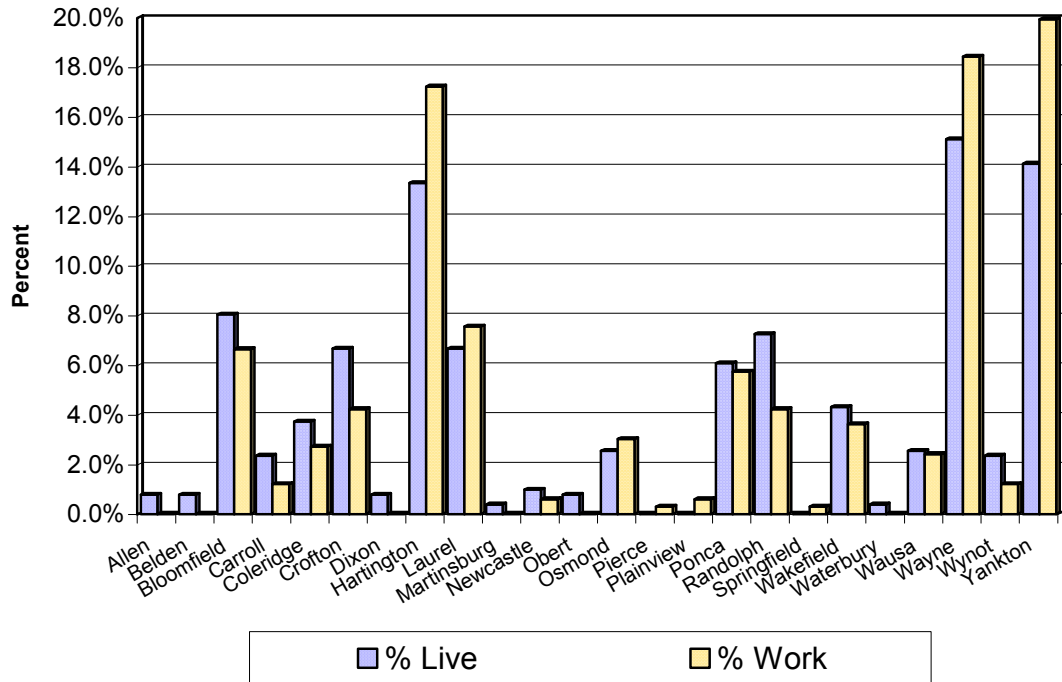
About a quarter of the employed household members in respondent households were employed in more than one job (see Appendix Table 2). Sixty-nine percent of employed household members drove a mile or more to work.<sup>7</sup> The average commute for those driving to work was 12.9 miles. Not surprisingly, employed respondents lived in a larger number of communities than they worked in (see Graph 5), that is, the largest communities included in the labor market area, Hartington, Wayne, and Yankton, represented a higher percentage of reported work locations than they did residence locations.<sup>8</sup>

The largest number, or percentage (26.8 percent), of employed household members was employed in the agricultural industry (see Graph 6). The other dominant industries for employment were service (14.5 percent), government (13.5 percent), and manufacturing (10.1 percent). Respondents reported employed household members had been in their current job an average of 15.8 years. Twenty-three percent of employed household members performed “professional” and 24.2 percent “skilled” work. Sales (13.1 percent), semi-skilled (11.5 percent), and clerical (10.9 percent) were the other types of work most commonly performed. Finally, 65.1 percent of employed respondents had employer-provided health insurance and 62.5 percent received paid vacation.

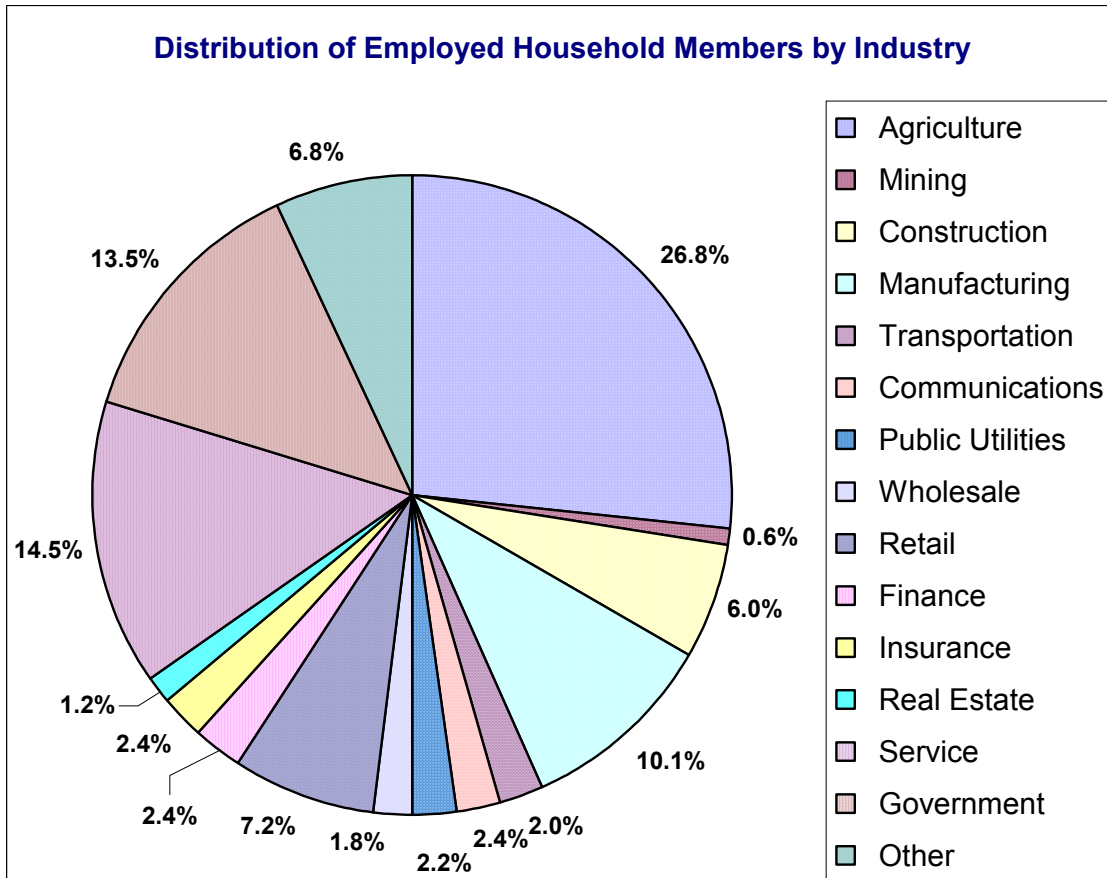
<sup>7</sup> We know those that commuted to work drove because the Census reported that no Cedar County workers used public transportation to get to work and only 5.9 percent walked.

<sup>8</sup> About fifteen percent of respondents reporting a work location reported a household member working in a community not included in the labor market area, for example, Sioux City, South Sioux City, Norfolk, etc.

### Distribution of Employed Household Members by Where They Live and Where They Work



**Graph 5**

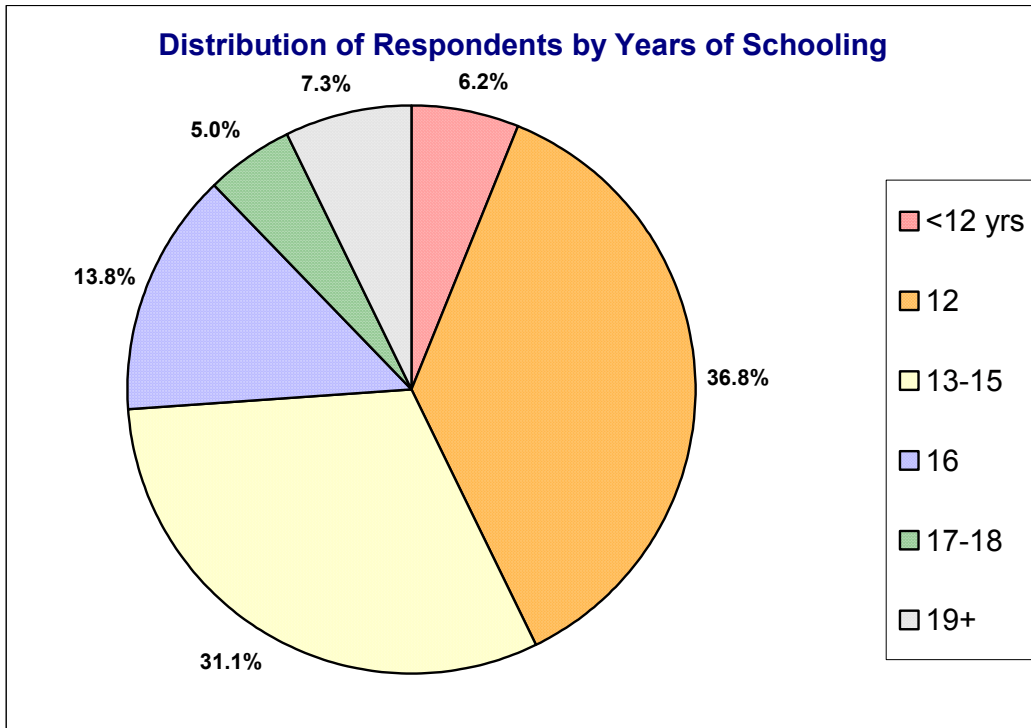


**Graph 6**

#### Respondent Characteristics

There were slightly more male respondents (51.0 percent) than female respondents (49.0 percent) (see Appendix Table 4). The average age of the respondents was 53.6 years, but the mode, or most common age reported, was 44.0 years. So, as a group, the respondents were comparatively young. The respondents were also fairly well educated. Most (57.2 percent) reported more than 12 years of schooling (see Graph 7). Fourteen percent reported 16 years of schooling and 12.3 percent reported more than 16 years. Seven percent of respondents reported they were fluent in a language other than English.

Finally, respondents were asked whether they had lived outside the Cedar County area. Given that Yankton, South Dakota, was included in the survey, it was not surprising that 64.7 percent reported they had. Nor was it surprising that 47.3 percent of those that reported living elsewhere reported living outside of Nebraska. About half of those living outside of Nebraska had lived in Yankton, meaning that half had lived elsewhere. Other locations included Iowa, Missouri, Montana, California, Alabama, Minnesota, and Texas.



Graph 7

### Potential Job Applicant Numbers and Characteristics

As noted, the currently unemployed probably do not represent a significant source of potential applicants for new jobs. In this case, that was because most of those individuals were retired (see Appendix Tables 1 and 3). Still, it is useful to note that the unemployed reported as willing to apply for new job openings (14.5 percent of the total unemployed) would require an average of \$9.44 per hour to accept such a job and that 57.6 percent would commute at least 16 miles for a new job.

Of employed household members, 39.8 percent reported they would apply for a new job in the Cedar County area (see Appendix Table 2). They would require an “average” wage of \$11.61 per hour<sup>1</sup> and 71.9 percent would commute at least 16 miles for such a job. The required wage rate and the percentage willing to commute 16 or more miles were substantially higher for the employed than for the unemployed. That is logical -- the unemployed would likely be willing to accept a comparatively low wage and most of the employed are already commuting some distance, so they would likely be willing to commute a greater distance for what would presumably be higher wages.

There were approximately 17,600 residential telephone numbers in the directories for the communities in the Cedar County labor market area. That suggests that the 510 households that responded to the survey represented 2.9 percent of all households in the labor market area<sup>2</sup> or that the 1,046 household members 16 years or older reported for

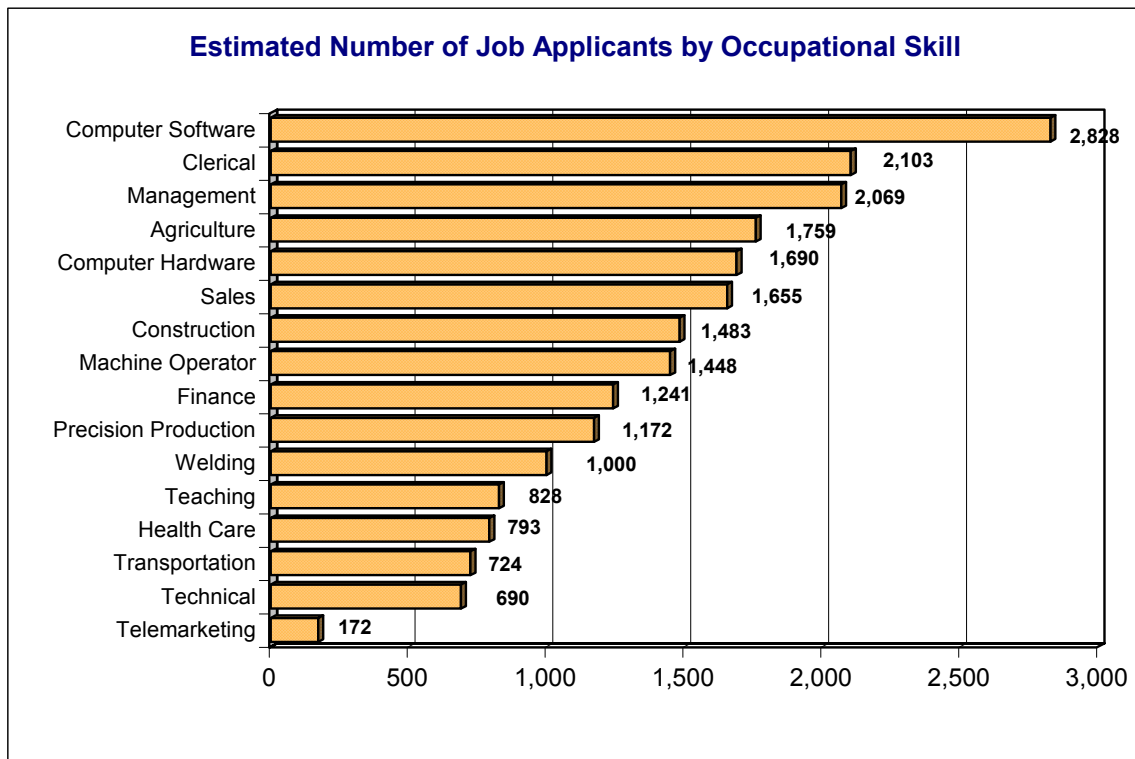
<sup>1</sup> Actually, this average is an under-estimate because the respondents were allowed to select a category “\$15 or more.” \$15 was used in calculating the average but many respondents in that category probably had in mind an hourly wage rate greater than \$15 per hour.

<sup>2</sup> (510 divided by 17,600 = .029) That is a low proportion compared to previous local labor surveys. The reason is because Yankton represented almost 40 percent of the survey households but only 14 percent of the



those households represented 2.9 percent of all working-age persons in the area. So, if the 159 employed household members reported as willing to apply for a new job also represented 2.9 percent of all such persons, then up to an estimated 5,480 working-age persons in the Cedar County labor market area were willing to consider applying for a new job.<sup>3</sup>

The potential number of job applicants by occupational skill in the Cedar County labor market area can be estimated using the same methodology. Specifically, that method led to an estimate that there were up to 2,800 persons with computer software skills willing to consider applying for a Cedar County job (see Graph 8).<sup>4</sup> Other leading skill categories were clerical (2,100 potential applicants), management (2,000), agriculture (1,750), computer hardware (1,700), and sales (1,600).<sup>5</sup>



**Graph 8**

Estimating the number of applicants for new jobs by wage rate provides another perspective on the Cedar County labor market. The number of potential applicants jumps geometrically from \$7.00 to \$10.00 per hour, suggesting marginal increases in offered wages would dramatically increase the size of the labor pool at those levels. From \$12.00 to

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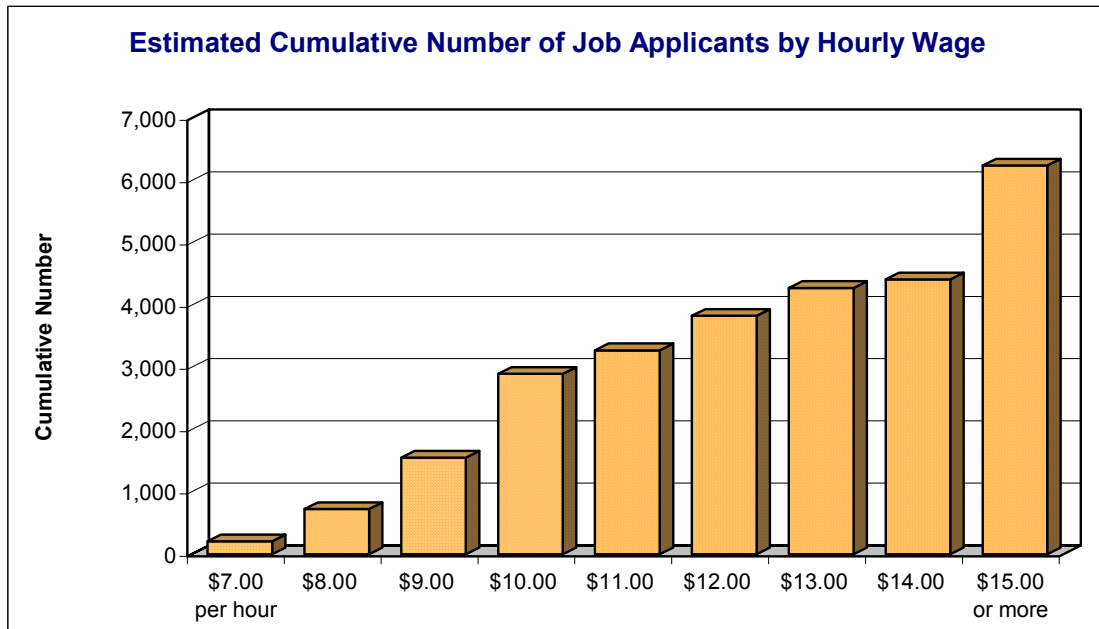
completed surveys. If Yankton is not included, the proportion becomes 0.041, a figure more in line with past surveys.

<sup>3</sup> As suggested, the inclusion of the Yankton surveys somewhat skews this extrapolation. If those surveys are dropped, the number of potential applicants falls to 3,561.

<sup>4</sup> These were self-reported skills, that is, respondents were not asked for verification that the household members possessed the reported skills.

<sup>5</sup> See Appendix Table 5 for a comparison of estimated potential job applicants by skill including and not including the Yankton surveys.

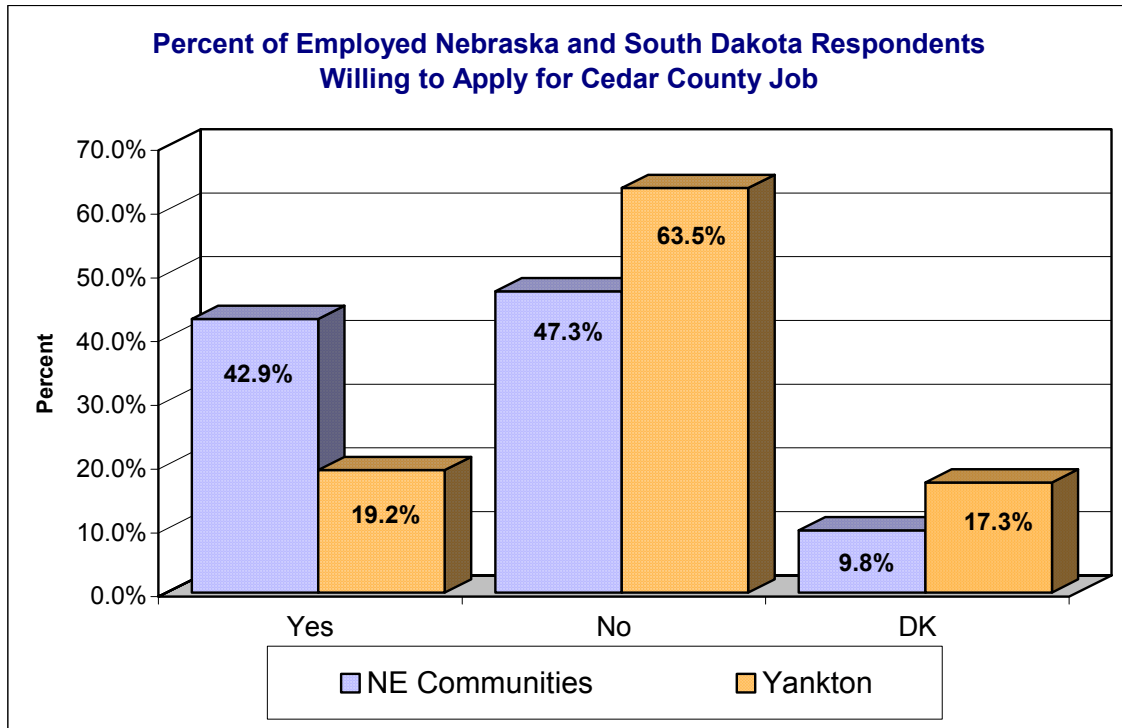
\$14.00 per hour, marginal increases would have a smaller effect. The jump from \$14.00 to \$15.00 or more per hour would again dramatically increase the number of applicants (because it really represents more than a \$1.00 per hour jump – see footnote #12).



**Graph 9**

Finally, we need to look at the issue of the interest of Yankton residents in applying for new job openings in Cedar County. The survey results tend to uphold the Census figures cited earlier – less than twenty percent of employed Yankton household members would consider applying for a job opening in Cedar County (see Graph 10). Compared to that, 42.9 percent of employed household members from the Nebraska communities would consider applying.<sup>6</sup> The only positive aspect of this comparison for potential Cedar County employers was that a significantly higher percent of Yankton respondents were undecided, suggesting they might be persuaded to consider a job opening in Cedar County.

<sup>6</sup> Chi-square analysis of this Nebraska-Yankton comparison shows a statistically significant difference in the responses of Nebraska and Yankton respondents. Specifically, considerably fewer Yankton respondents than expected answered “yes” to the question “Would they apply for a new job opening in Cedar County?”



**Graph 10**

## **Conclusion**

The Nebraska Department of Economic Development assisted Cedar County communities conduct a local labor market survey in October 2002. That random sample telephone survey resulted in a total of 510 completed surveys, including 72 from Yankton, South Dakota. The results suggested there were up to 5,400 employed working-age persons in the labor market area who would consider applying for new job openings in Cedar County. Those individuals have a variety of occupational skills, the most common being computer software, clerical, and management skills. Potential employers would likely have to offer \$10.00 to \$11.00 per hour and health insurance and paid vacation to generate an adequate number of applicants.

In addition to suggesting the Cedar County labor market includes enough potential job applicants to satisfy the needs of any likely new employer,<sup>7</sup> the ability of Cedar County communities to organize to conduct this survey illustrated their commitment to local economic development.

<sup>7</sup> As noted, the inclusion of the Yankton surveys inflates the projected number of total potential job applicants and of applicants by skill but, as shown in Appendix Table 5, even if the Yankton surveys are excluded there are still adequate numbers of potential applicants. Nonetheless, an actual employer hiring new workers would likely have a different experience than suggested by this survey, because people do not always respond the way they say they would.

## APPENDIX TABLES

**Table 1. Household Characteristics - Cedar County**

Characteristic	Number/Value	Percent
<b>Number of Households Completing Survey</b>	510	NA
<b>Total Household Members 16 Years and Older</b>	1,046	NA
Average Working-Age Persons Per Household	2.1	NA
<b>Employment Status of Members 16 &amp; Older:</b>		
Employed Full-time Outside the Household	497	48.3%
Employed Part-time Outside the Household	146	14.2%
Self-Employed	140	13.6%
Not Working, But Seeking	17	1.7%
Not Working, Not Seeking	230	22.3%
<b>Reasons Not Seeking Work: <sup>1</sup></b>		
Unable to Work Outside Household	8	3.5%
Still in School	25	11.0%
No Acceptable Jobs Available	2	0.9%
Retired	183	80.6%
Other	9	4.0%

<sup>1</sup> "Reasons Not Seeking Work" may or may not equal number "Not Working, Not Seeking." Interviewers were instructed to allow multiple answers, so total "Reasons" could exceed total "Not Working." On the other hand, not all respondents answered every applicable question (interviewers were instructed not to pursue questions that respondents were reluctant to answer).

**Table 2. Job Interest and Skills of Employed Household Members**

Item	No./Value	Percent	Item	No./Value	Percent
<b>Would apply for job opening?</b>			<b>More Than One Job?:</b>		
Yes	159	39.8%	Yes	97	24.3%
No	197	49.4%	No	302	75.7%
Don't Know	43	10.8%	<b>Commute:</b>		
<b>Acceptable Wage:</b> <sup>1</sup>			None	121	30.3%
\$7.00 per hour	6	3.3%	Distance 1 or more miles	278	69.7%
\$8.00	15	8.3%	Average Distance	12.9	
\$9.00	24	13.3%	<b>Industry Employed:</b>		
\$10.00	39	21.5%	Agriculture	133	26.8%
\$11.00	11	6.1%	Mining	3	0.6%
\$12.00	16	8.8%	Construction	30	6.0%
\$13.00	13	7.2%	Manufacturing	50	10.1%
\$14.00	4	2.2%	Transportation	10	2.0%
\$15.00 or more	53	29.3%	Communications	12	2.4%
Don't Know	0	NA	Public Utilities	11	2.2%
Average Acceptable Wage	\$11.61		Wholesale	9	1.8%
<b>Acceptable One-Way Commute:</b> <sup>1</sup>			Retail	36	7.2%
Less than 5 miles	7	3.8%	Finance	12	2.4%
5-15 miles	44	24.2%	Insurance	12	2.4%
16-30 miles	96	52.7%	Real Estate	6	1.2%
31-50 miles	24	13.2%	Service	72	14.5%
Over 50 miles	11	6.0%	Government	67	13.5%
Don't Know	5	NA	Other	34	6.8%
<b>Occupational Skills:</b>			<b>Average Years in Current Job</b>	15.8	
Computer Hardware	108	7.1%	<b>Type of Work Performed:</b>		
Computer Software	180	11.9%	Professional	114	23.4%
Clerical	147	9.7%	Sales	64	13.1%
Precision Production	80	5.3%	Clerical	53	10.9%
Sales	118	7.8%	Technical	44	9.0%
Transportation	65	4.3%	Skilled	118	24.2%
Management	144	9.5%	Semi-skilled	56	11.5%
Machine Operator	103	6.8%	Unskilled	39	8.0%
Finance	93	6.1%	Don't Know	19	NA
Health Care	53	3.5%	<b>Have employer health insurance?</b>		
Technical	38	2.5%	Yes	248	65.1%
Welding	75	5.0%	No	129	33.9%
Construction	96	6.3%	Don't Know	4	1.0%
Telemarketing	11	0.7%	<b>Have employer paid vacation?</b>		
Teaching	59	3.9%	Yes	235	62.5%
Agriculture	143	9.5%	No	133	35.4%
None	18	NA	Don't Know	8	2.1%

<sup>1</sup> Totals in this category may exceed total responding "Yes" to "Apply for job opening." Some respondents responding "Don't Know" to that question did provide acceptable wage rates and commuting miles.

**Table 3. Job Interests and Skills of the Unemployed Household Members**

Item	No./Value	Percent	Item	No./Value	Percent
<b>Would apply for job opening?</b>			<b>Occupational Skills:</b>		
Yes	25	14.5%	Computer	10	11.8%
No	140	80.9%	Hardware	15	17.6%
Don't Know	8	4.6%	Computer Software	10	11.8%
<b>Acceptable Wage: <sup>1</sup></b>			Precision		
\$7.00 per hour	8	29.6%	Production	0	0.0%
\$8.00	3	11.1%	Sales	6	7.1%
\$9.00	4	14.8%	Transportation	3	3.5%
\$10.00	7	25.9%	Management	4	4.7%
\$11.00	1	3.7%	Machine Operator	5	5.9%
\$12.00	0	0.0%	Finance	6	7.1%
\$13.00	1	3.7%	Health Care	6	7.1%
\$14.00	0	0.0%	Technical	1	1.2%
\$15.00 or more	3	11.1%	Welding	2	2.4%
Don't Know	0	NA	Construction	2	2.4%
(Weighted) Average Wage	\$9.44		Telemarketing	4	4.7%
<b>Acceptable One-Way Commute: <sup>1</sup></b>			Teaching	4	4.7%
Less than 5 miles	3	11.5%	Agriculture	7	8.2%
5-15 miles	8	30.8%	Don't Know	1	NA
16-30 miles	9	34.6%			
31-50 miles	5	19.2%			
Over 50 miles	1	3.8%			
Don't Know	1	NA			

<sup>1</sup> Totals in this category may exceed total responding "Yes" to "Apply for job opening." Some respondents responding "Don't Know" to that question did provide acceptable wage rates and commuting miles.

**Table 4. Respondent Characteristics**

Characteristic	Number/Value	Percent	Characteristic	Number/Value	Percent
<b>Age:</b>			<b>Education:</b>		
Mean	53.6		8 Years of Schooling	18	3.6%
Median	44.0		9	3	0.6%
Mode	51.0		10	5	1.0%
			11	5	1.0%
			12	186	36.8%
<b>Lived Elsewhere:</b>			<b>Fluent in Second Language:</b>		
Yes	328	64.7%	13	55	10.9%
No	179	35.3%	14	86	17.0%
			15	16	3.2%
Elsewhere in NE	166	52.7%	16	70	13.8%
Elsewhere outside NE	149	47.3%	17	15	3.0%
			18	10	2.0%
Elsewhere outside Cedar County (selectively):			19 or more	37	7.3%
Military Service	4	1.2%	Average	13.7	
Yankton, SD	73	22.3%	<b>Gender:</b>		
Iowa	13	4.0%	Yes	36	7.2%
South Dakota	15	4.6%	No	465	92.8%
Wayne, NE	49	14.9%	<b>Gender:</b>		
Dixon County, NE	13	4.0%	Male	260	51.0%
Pierce County, NE	8	2.4%	Female	250	49.0%

**Table 5. Estimated Applicants by Skill With and Without the Yankton, S.D., Surveys<sup>1</sup>**

	Number		Difference
	With	Without	
Telemarketing	172	98	74
Technical	690	463	227
Transportation	724	512	212
Health Care	793	537	256
Teaching	828	537	291
Welding	1,000	707	293
Precision Production	1,172	805	367
Finance	1,241	854	387
Machine Operator	1,448	1,000	448
Construction	1,483	1,024	459
Sales	1,655	1,146	509
Computer Hardware	1,690	1,073	617
Agriculture	1,759	1,244	515
Management	2,069	1,366	703
Clerical	2,103	1,415	688
Computer Software	2,828	1,878	950

<sup>1</sup> The "with" extrapolation is calculated using 0.029 and all the surveys and the "without" extrapolation using 0.041 and only the Nebraska survey communities.