

# 2001 Labor Force Assessment Northeast Minnesota

Household Survey  
Firm Survey  
***Supporting and Technical Data***

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Final Report  
December 2001

## **Project support and stakeholders:**

- ✍ Arrowhead Regional Development Commission
- ✍ Department of Commerce, Economic Development Administration
- ✍ Iron Range Resources and Rehabilitation Board
- ✍ Minnesota Department of Economic Security
- ✍ Minnesota Department of Trade and Economic Development
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- ✍ Northland Foundation
- ✍ St. Louis County Community Development
- ✍ Team Duluth
- ✍ UMD Center for Economic Development
- ✍ UMD SBE Bureau of Business and Economic Research
- ✍ UMD School of Business and Economics
- ✍ University of Minnesota Duluth

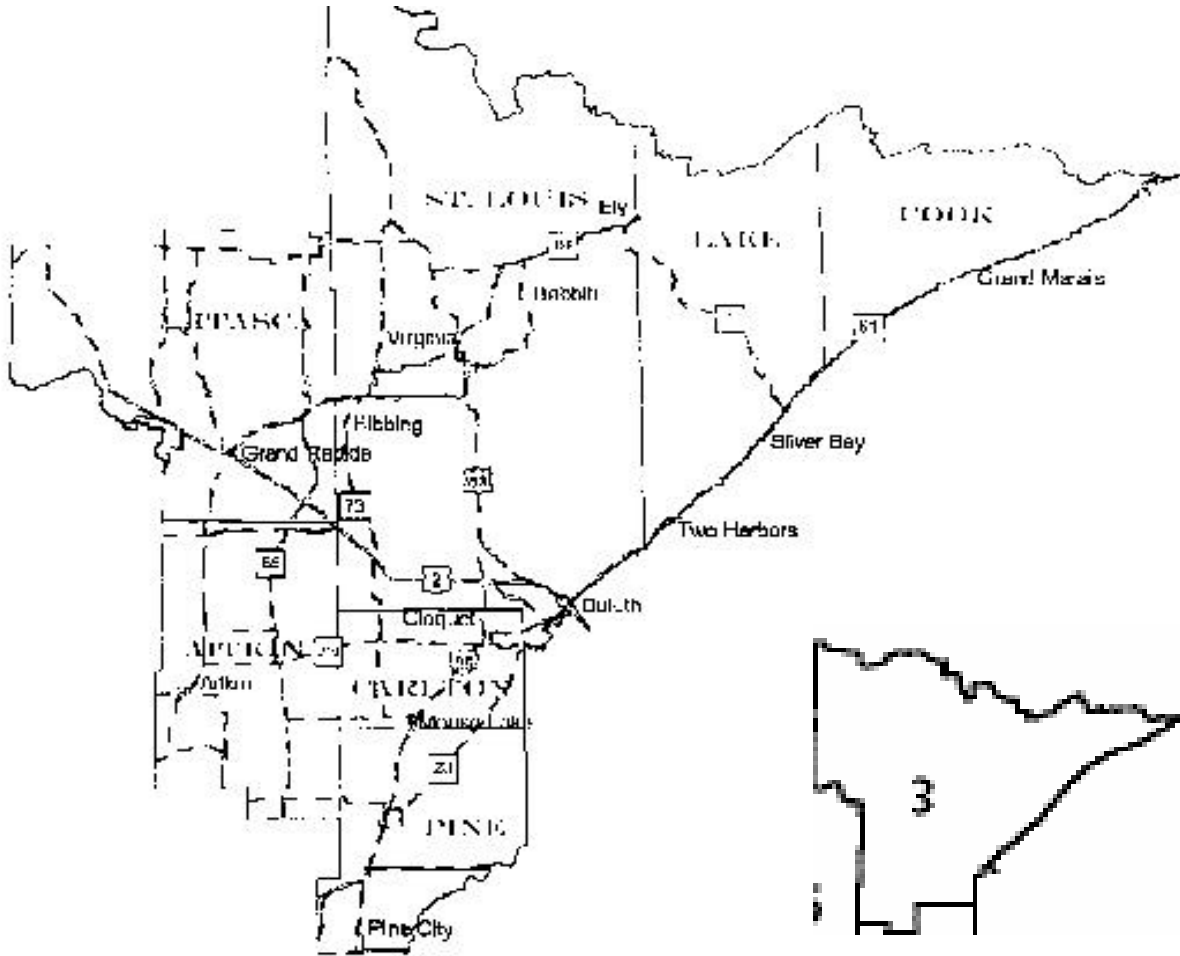
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Study area – Region III Minnesota Planning (plus Crow Wing County, MN and Douglas County, WI)



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This research continues the work  
of the Northeast Minnesota  
Skills Assessment Project



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## *Preface*

This report summarizes two separate surveys, one of firms and the other of households, administered in Northeast Minnesota during the 2001 calendar year. Each contains an executive summary and a complete listing of the results. This preface summarizes some of the more important findings, reveals surprises we found in the data, and suggests ways in which these data might be used for economic development purposes.

### **Some Significant Findings:**

Both surveys were conducted so that two sub-regions could be delineated.

- ✍ The first of these was termed the Twin Ports Region, consisting of Duluth, Minnesota and Douglas County, Wisconsin. While this report is written for Minnesota, the Twin Ports constitutes a single labor market. Therefore, to ignore Douglas County would result in a distortion of some of the findings.
- ✍ The second region consists of the Iron Range. This region is made up of northern St. Louis County, all other counties in planning region three, with the addition of Crow Wing County.

When both the firm and the household data were organized into these two regional definitions, in most cases, statistical differences between the two regions were generally found to be insignificant when comparing firms with firms and households with households. From a labor market point of view, the two regions can most productively be considered as one.

The vast majority of regional firms were small (less than 20 employees). This result is true for both the Twin Ports and the Range.

There were a significant number of house-holds reporting relatively high level skills. Firms, however, were generally looking for lower skills than were available in the region.

There are three generally recognized types of underemployment:

- ✍ Individuals working fewer hours than they would prefer,
- ✍ Individuals working in jobs that require less than the individual's level of expertise or skills, and
- ✍ Individuals working within their skill for a wage below that generally paid to this particular skill.

The survey found significant under-employment in the first two categories. The Minnesota Department of Economic Security wage and salary surveys points to significant underemployment in the third category as well.

There are strong indications of a positive work ethic in the region and a strong willingness to upgrade skills to meet potential future skill requirements even if the training/education has to be paid out of the individual's own pocket.

There are a significant number of people that are unemployed that would like to be employed or start a business of their own. Many of these have self-reported skills and skill-based certificates or licenses. Further, many are retired individuals who would like to work part or full-time.

Individuals looking for either a job or interested in finding a job that better utilizes their skills are willing to commute significant distances to their place of work.

### **Some Surprises**

It is not uncommon for a surveyor to anticipate responses to particular questions. Surprises come when the reality of the response does not agree with the anticipated results. There are three areas where these surprises were found within this survey.

It seems that regional households are better prepared for future labor markets than are the firms. While households are heavily involved in training and education, even at their own expense, firms appear to provide a minimum of training for future work requirements. Households report several specific computer skills that are either taken for granted by firms or the firms have confidence that the employees can handle these skills. While the households report a large number of certificates and skills, firms appear to be looking for lower skilled individuals. These differences might be attributed to the disproportionate number of smaller firms that characterize the region.

Regional firms employing less than 20 individuals appear to be using the regional universities for support and advice. As an example, the University of Minnesota Duluth's Center for Economic Development is one entity that is utilized by regional firms.

It is often said that Northeast Minnesota is heavily unionized and that these unions tend to be particularly aggressive. The household survey finds that union membership is relatively low (20% of the workers). Unionized firms generally report that their relations with the union are satisfactory and that unions often work with, rather than against, the firm's interests.

### **Usefulness to Developers**

Available workforce has emerged as a major determinant of firm location. While firms used to accept local developer's estimates of labor availability, work ethic, and level of training, they now require evidence. The most important contribution surveys like this one can make is to provide the information firms require.

Evidence of underemployment (a hidden labor force), individuals outside the official definition of labor force that are available under the right conditions (such as retired individuals or individuals willing to but not seeking work), the importance of small business to the region, the number of workers belonging to an union, indications of the relationships between unions and firms, evidence of a strong, regional work ethic, lists of skills and certificates, and many other components of the data in this survey provide the information prospective firms can use in making their location decisions.

This is the fourth in a yearly series of surveys of this type. Two of the previous survey users, the Iron Range Resources and Rehabilitation Board and the County of St. Louis have expressed satisfaction with the usefulness of the data for informing firms of our labor force advantages. Members of the School of Business and Economics, Bureau of Business and Economic Research team have made presentations to prospective firms for the City of Duluth. A regularly updated

Web site has been utilized by firms interested in the region as well as by individuals responsible for the economic development of the region.

Carefully constructed surveys and resulting data represent another element in the firm location package. From many perspectives, data is power. Those regions with useful information on the local economy are a step ahead of regions that continue to provide information on a, “Take my word for it” basis.



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**2001 Survey of Households  
Northeastern Minnesota**

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## *Household Survey Executive Summary*

The Bureau of Business and Economic Research conducted its fourth telephone survey of a stratified random sample of a random adult in 1453 Northeastern Minnesota households to determine work skills, potential under-employment and work preferences of the workforce aged 16 and over. Interviews were conducted by the Minnesota Center for Survey Research (MCSR) between July 2<sup>nd</sup> and September 27<sup>th</sup>, 2001 using a revised and expanded survey schedule. A cooperation rate of 61% was achieved. Since the survey was conducted during a period of economic downturn, including a terrorist attack in New York, readers are encouraged to keep the historic context in mind in interpreting these findings. Statistical findings are reported in nine tables with appendices providing some specific job and skill detail.

Following the preferences of match funders, this report compares the Range and Port Cities, although there are more similarities than differences between these two regions. Overall, 36% of respondents were not currently employed (Range 40%, Port Cities 29%) and 70% of these were retired. Some 11% of the non-working, retired would like part-time work and 3% would like full-time work. A third of the not retired, unemployed would like part-time work and 40% would like full-time work. About 8% were attempting to start a new business. When asked about work skills, not working respondents listed an average of 1.9 skills, although 56% felt it would be somewhat or very difficult to find such a job in the area. These potential workers prefer, on average, to work 33 hours per week and 43 weeks during the year. The lowest starting wage they would consider was \$10.00 per hour although the majority would be willing to forgo some other benefits to start work.

Overall, 64% were currently employed at an average of 1.2 jobs with 1.2 different employers including, for 16%, being self-employed. They worked an average of 40 hours per week at these jobs and 70% were paid more than \$10.00 per hour; a majority had medical, life, retirement and vacation benefits. Most were satisfied with their work situation but 36% wanted to change how much they worked. Two thirds of these would like to work fewer hours at their current jobs but 24% wanted to work more hours, and 8% were looking for additional full or part-time jobs. About 16% had quit a job in the past year, and 14% planned to quit some current job within the next year.

The currently employed were asked about under use of their skills. About a third said that their jobs did not use all of their skills and they listed, on average, 1.3 unused work skills. Three quarters of these felt that it would be difficult to find a job using their skills in the region. Over sixty percent would be willing to change employment if a job using more of their skills became available. On average the starting wage they would require would be \$12.40 per hour and a quarter would be willing to drive over 30 miles one way to such a job. With the possible exception of paid vacations, a majority would accept a job using more of their skills, even if it did not include other job benefits.

Over half of working or job-seeking respondents would prefer work in the Port Cities area (91% of those living in the Port Cities and 36% of those on the Range). About 45% prefer another area in Northeast Minnesota (54% of those living on the Range and 29% of those living in the Port Cities). Only 14% of these respondents would take a suitable job in the Twin Cities but 24% would take a job outside Minnesota. Of those who would prefer a job in Northeast Minnesota, some 70% would take a suitable job even if it meant a lower wage than they could command elsewhere. About 7% plan to leave Northeast Minnesota in the next year. Almost half (46%) of respondents would like to telecommute from home.

Over half of all respondents had some job-related certificate, license or degree (1.7 on average). A fifth of the respondents were currently taking courses or training programs (about a quarter at work, a quarter reimbursed for other training, and 39% paying for the training themselves). Respondents were asked about their interest in a list of 9 skills. In general, there was most interest in finding information on the Internet and least interest in repair, machine process control programming and sales. About 19% would like to learn software development and programming skills, 16% felt they could do Internet searching with some updating of their skill, 40% indicate they need no training to use Internet search skills in a job. When asked about 6 more technical knowledge areas, 63% felt very or somewhat skilled at figuring out technical problems, 57% were similarly skilled in algebra, 48% in some physical science area (e.g. biology, physics), 35% in managing technical work teams, 27% in some computer programming language, and 17% in calculus. A measure of work ethic attitudes again suggests a substantial work ethic among Northeast Minnesota respondents.

## Background

The Bureau of Business and Economic Research at the University of Minnesota conducted a fourth survey of the working age population in Northeast Minnesota during the summer of 2001. The interview schedule included items from previous surveys and added questions to supplement and expand previously used questions. A stratified random sample for households was used, stratified by county and the Port Cities. Counties included in this region are Aitkin, Carlton, Cook, Crow Wing, Itasca, Koochiching, Lake and St. Louis plus Superior (Douglas County) Wisconsin. Within each household a random adult aged 16 or older was selected. Data have been weighted to represent all working age (16+) adults in Northeastern Minnesota.

As in earlier surveys, telephone interviews were conducted by the Minnesota Center for Survey Research at the University of Minnesota between July 2<sup>nd</sup> and September 27<sup>th</sup>, 2001. Follow-up calls assured that selected households helped assure that a higher percentage of the intended sample was included. A response rate of 61% (percent of those actually contacted and able to be interviewed) was achieved (49% of all valid household phone numbers called). A final sample of 1,453 was achieved.

The survey included questions about current employment, skills they would like to use in a job, hours they would like to work, preferred starting wage, fringe benefits and changes they would like to make in their work situation. Questions about work attitudes, satisfaction with work, planned retirement, skill training and certificates and licenses they hold were included. The survey provides information about under-employment and skills available in the workforce of Northeastern Minnesota.

Probably more than most surveys, readers of this report should remember the context of these data. Interviewing started on July 2<sup>nd</sup> after several months of weakening economic activity especially in mining on the Range, layoffs and stock market declines. Then, on September 11<sup>th</sup> the terrorist attack on the New York Trade Center occurred. Less than one tenth (7.4%) of the interviews in this survey were completed after September 10<sup>th</sup>. Telephone interviewing ended on September 27<sup>th</sup> as graphic responses to the tragedy and the anthrax scare were unfolding. During this time the stock market experienced significant plunges, adding to the sense of uncertainty. All of these events coupled with the gradual decline in survey response rates nationally, mean that results of any survey should be studied with some reflection and care.

This report provides data for the Range and Port Cities, a split that has been of interest in earlier surveys. As in those surveys, the two regions are more similar than different on a range of work related topics. Thus, the overall distribution of responses may be of greater interest. Among the strengths of this survey are that it includes the whole potential labor force (including any person age 16 and above), and it inquires about multiple jobs and employers rather than assuming that there is a single employer. The survey also inquires about the range of skills that employed or unemployed respondents may want to use in their work and various aspects of potential under-employment. As in any large survey, many other analyses are possible, given the formulation of specific questions of interest.

## Characteristics of Respondents

Table 1 provides the distribution of responses for selected respondent characteristics. According to the stratified sampling design, two-thirds of respondents are located in counties of the Range and a third is located in the Port Cities of Duluth and Superior (Douglas County, Wisconsin). On average, Range respondents were 80.4 miles from the Duluth-Superior area and Port Cities' respondents averaged 16 miles from the Duluth-Superior area. Respondents ranged in age from 16 to 95. On average respondents from the Range were older (47.9 years) than was true of the Port Cities (43.9 years). Overall, 59% of respondents were female. Only 1.5% had less than a high school education and 8.7% had a graduate or professional degree. Education did not differ significantly between the Range and Port Cities' respondents. About two-thirds of respondents (65.3%) had education *beyond* a high school degree.

Households included about 2.4 people, on average, who were potentially available to the labor force (that is, aged 16 or older). On average, a household had 1.3 people aged 16+ who were working full-time (1.2 for the Range and 1.4 for the Port Cities) and .6 people working part time (.5 for the Range and .7 for the Port Cities). An additional .2 people per household, on average, were looking for work (.2 for the Range and .3 for the Port Cities). In each case except "looking for work" the modest Range and Port Cities differences are statistically significant.

Respondents, on average, were planning to retire at age 59.7 years although about 7% said they planned never to retire.

About 93% of all respondents were surveyed before September 11<sup>th</sup>, slightly more for the Range (94.2%) than for the Port Cities (89.5%).

## Respondents NOT Currently Employed

Table 2 provides information from the survey about those who indicated they were not currently employed. Overall, about one third (36.2%) of respondents were not currently employed, statistically significantly higher on the Range (39.9%) than in the Port Cities (28.7%). Of those not currently employed, most (70%) said they were retired. Thus, as of the summer, 2001 the overall unemployment rate in Northeastern Minnesota for those 16 and older that are not retired is 10.9% (and 13.4% of those who said they were retired also want to find a full or part-time job).

Among those who are not currently employed but who are retired, 10.7% would like a part-time job (11.2% on the Range and 9.2% in the Port Cities). Another 2.7% would like full-time work (1.5% on the Range and 6.1% in the Port Cities). However, only 0.8% had looked for a job in the past month. Several (1.14%) of the not currently employed retired respondents were taking steps to start a new business by themselves or with someone else.



**Table 1**  
**Background Characteristics of All Respondents**  
**Northeast Minnesota Workforce Survey, 2001<sup>1</sup>**

Item	Range	Port Cities	Overall	sig <sup>2</sup>
County of residence				
Douglas, Wisconsin (includes City of Superior)		30.4%	10.2%	
Aitkin	5.9%		3.9	
Carlton	11.2		7.4	
Cook	2.2		1.4	
Crow Wing	21.3		14.2	sig
Itasca	11.2		7.4	
Koochiching	5.2		3.4	
Lake	4.2		2.9	
St Louis (includes City of Duluth)	<u>38.8</u>	<u>69.6</u>	<u>49.1</u>	
	100%	100%	100%	
	(965)	(488)	(1453) <sup>3</sup>	
Average number of miles from Duluth/Superior area:	80.4 (936)	16.0 (122)	73.0 (1058)	Sig
Average age of respondent	47.9 (935)	43.9 (474)	46.6 (1410)	sig
Percent of respondents who are female	59.6% (965)	58.4% (488)	59.2%(1453)	ns
Average number of people in household aged 16 and older	2.4 (958)	2.4 (482)	2.4 (1440)	ns
Average number aged 16+ who are:				
working full-time	1.2 (958)	1.4 (482)	1.3 (1439)	sig
working part-time	0.5 (957)	0.7 (482)	0.6 (1440)	sig
looking for work	0.2 (958)	0.3 (482)	0.2 (1440)	ns
Average age planning to retire (or retired) (range age 18 to 100)	59.8 (730)	59.5 (353)	59.7 (1083)	ns
Percent who "never" plan to retire	6.0% (777)	7.6% (383)	6.6% (1160)	sig
	94.2% (965)	89.5% (488)	92.6 (1453)	ns

<sup>1</sup> Data are from a stratified random sample of households (and a random 16+ year old within selected households) in the 7 counties of northeastern Minnesota, plus adjacent Crow Wing County, and Douglas County in northwestern Wisconsin where Superior, one of the Port Cities, is located. The telephone survey was conducted in the summer, 2001.

<sup>2</sup> The chi square or ANOVA test of significance was used. *Sig* indicates that the difference between Range and Port Cities respondents is statistically significant at the .05 level. *Ns* indicate the difference is not statistically significant.

<sup>3</sup> The number of cases that constitutes the base of percentages or averages is shown in parentheses.

For those who were unemployed but not among the retired, 32.7% would like to have part-time work and another 40.4% would like full-time work. Respondents on the Range were significantly more interested in full-time work as compared to the Port Cities (Range, 45.6% and the Port Cities, 26.2%). Only a quarter (24.6%) of the unemployed but not retired on the Range wanted a part-time job compared to 54.8% for those in the Port Cities.

Almost half (46.8%) of unemployed but not retired respondents looked for a job in the month before their interview and the Range and Port Cities do not differ significantly on this. On average, it had been 126.6 weeks since the unemployed but not retired had had a job. Again, many were seeking to start a new business for themselves or with someone else. Overall 7.5% in the region were attempting to do this with Port Cities' respondents much more likely to seek self-employment (16.7% for the Port Cities vs. 4.3% for Range respondents).

Respondents were asked to list the work skills or talents they would like to use in a job. Appendix A lists these. On average, respondents listed 1.9 skills they had to offer. About half (56.1%) said they thought it would be somewhat or very difficult to find a job in Northeast Minnesota (or Northwest Wisconsin for Douglas County respondent's) that matched up with their skills. Six and a half percent of respondents thought no job would be available in the region that would match up with their skills. These differences are not statistically significant between the Port Cities and the Range.

When respondents worked, they preferred to work, on average, 33.2 hours per week and 43.2 weeks per year. Overall, the average lowest wage they would be willing to start with to take a job was \$10.00 per hour. In general, the majority would be willing to start a job without benefits. Almost two-thirds (59.3%) would be willing to forgo medical coverage, 74.4% would forgo life insurance, 63.8% would forgo contributions to a retirement plan and 63.1% would forgo a paid vacation benefit. When asked how many miles they would be willing to travel one-way to work, about half (46.3%) would be willing to travel up to 15 miles and 17.9% would be willing to travel 31 miles or more. None of these opinions differ significantly by region.

## Respondents Who Are Currently Employed

A series of questions was asked of those who are currently employed. Table 3 provides a summary of their characteristics and preferences. Overall, 63.8% of the 1452 respondents were currently employed and the figure was somewhat higher in the Port Cities (71.3%) than on the Range (60.1%).

Among those who were currently employed, about 16% were self-employed. Eight percent had jobs where they were "on call" (e.g. substitute teacher, trucker), 10% were independent contractors and about 1% had jobs through a temporary agency. The regions did not differ significantly on these types of work situation.

**Table 2**  
**Work Preferences of those NOT Currently Working**  
**Northeast Minnesota Workforce Survey, 2001<sup>4</sup>**

Item	Range	Port Cities	Overall	sig <sup>5</sup>
Percent <u>NOT</u> currently employed	39.9% (964) <sup>6</sup>	28.7% (488)	36.2% (1452)	sig
Percent <i>of those not currently employed</i> who are retired	69.7% (386)	70.7% (140)	70.0% (526)	ns
Percent of retired who would like to work <i>part-time</i>	11.2% (238)	9.2% (98)	10.7% (366)	sig
Percent of retired who would like to work <i>full-time</i>	1.5% (238)	6.1% (98)	2.7% (366)	sig
Percent who have <i>looked for a job</i> in the last month	0.4% (269)	2.0% (98)	0.8% (367)	ns
Percent of retired who are currently taking steps to start a <i>new business</i> by themselves or with someone else	0.7% (269)	3.1% (98)	1.4% (367)	ns
Percent <i>unemployed but not retired</i>	30.3% (117)	29.3% (42)	30.0% (159)	ns
Percent of unemployed who would like to work <i>part-time</i>	24.6% (114)	54.8% (42)	32.7% (156)	sig
Percent of unemployed who would like to work <i>full-time</i>	45.6% (114)	26.2% (42)	40.4% (156)	sig
Percent who have <i>looked for a job</i> in the last month	48.7% (115)	41.5% (41)	46.8% (156)	ns
Average number of <i>weeks since last job</i> among unemployed	140.7 (98)	81.7 (31)	126.6 (129)	ns
Percent of retired who are currently taking steps to start a <i>new business</i> by themselves or with someone else	4.3% (117)	16.7% (42)	7.5% (159)	sig
Average number of work skills or talents respondent would LIKE to use in a job? (see Appendix A for listing)	1.9 (119)	1.2 (49)	1.9 (169)	ns
How difficult do you think it would be to get a job in Northeast Minnesota (or Northwest Wisconsin for those in Douglas County) that matches up with your skills?				
Very difficult	22.4%	20.8%	21.9%	
Somewhat difficult	30.8	41.7	34.2	ns
Not very difficult	40.2	31.3	37.4	
Impossible because no such job is available	<u>6.5</u> 100.0 (107)	<u>6.3</u> 100.0% (48)	6.5 100.0% (155)	
Average number of <i>hours worked per week</i> respondent would like to work when employed (range 6 – 60 hours)	34.3 (114)	30.5 (46)	33.2 (160)	ns
Average number of weeks per year respondent liked to work when they were last employed (range 12 – 52).	43.6 (109)	41.8 (37)	43.2 (146)	ns

<sup>4</sup> Data are from a stratified random sample of households (and a random 16+ year old within selected households) in the 7 counties of northeastern Minnesota, plus adjacent Crow Wing County, and Douglas County in northwestern Wisconsin where Superior, one of the Port Cities, is located. The telephone survey was conducted in the summer, 2001.

<sup>5</sup> The chi square or ANOVA test of significance was used. Sig indicates that the difference between Range and Port Cities respondents is statistically significant at the .05 level. Ns indicate the difference is not statistically significant.

<sup>6</sup> The number of cases that constitutes the base of percentages or averages is shown in parentheses.

Average lowest pay per hour that respondent would be willing to <i>start with</i> to take a job? ( <i>Range is \$5.00 to \$30.00</i> )	\$10.11 (112)	\$9.73 (46)	\$10.00 (158)	ns
Percent who <i>would</i> take a job that DID NOT offer the following benefits?				
Medical coverage	57.1% (119)	64.6% (48)	59.3% (167)	ns
Life insurance	71.7% (113)	80.9% (47)	74.4% (160)	ns
Contributions to a retirement plan	61.7% (115)	68.8% (48)	63.8% (163)	ns
Paid vacation	62.2% (111)	65.3% (49)	63.1% (160)	ns
How many miles would you be <u>willing to travel</u> one-way to work?				
0 - 15 miles	45.3%	48.9%	46.3%	
16 - 30 miles	33.3	42.2	35.8	
31 - 60 miles	17.9	4.4	14.2	ns
61 miles or more	<u>3.4</u>	<u>4.4</u>	<u>3.7</u>	
	100.0 (117)	100.0 (45)	100.0 (162)	

Respondents who were currently employed had, on average, more than one employer (1.2) and more than one job (1.2). They worked, on average, a total of 39.5 hours per week at their job/s. Sixteen percent changed some employer during the preceding year (since summer, 2000). About 70% had some job that paid more than \$10.00 per hour. Sixty percent had medical coverage, 53% had life insurance as a job benefit, 60% had contributions made to a retirement plan and 65% had paid vacations. None of these work characteristics differed significantly between the Port Cities and the Range.

Currently employed respondents were asked if they were satisfied with their current work situation and more than half reported being “very satisfied” (54.8%) and another 34.9% reported being “somewhat satisfied”. Only 10.4% reported being “somewhat” or “very” dissatisfied with their work situation. These differences do not differ significantly between Port Cities and the Range.

On the other hand, 36.4% would like to change how much they work. When asked about the kind of change they would like to make, 14% said they would like to *work fewer different jobs* and 65.4% would like to *work fewer hours* at their current jobs. Almost a quarter (24.2%) wanted to work more hours at their current jobs and 11.2% wanted to have additional part or full-time jobs. Nearly 8% were currently looking for a full-time job and 7.7% were currently looking for a part time job. A quarter wanted other kinds of changes. Again these do not differ significantly by region.

Some 14.3% of respondents who were currently employed were planning to quit some current job within the next year; 17.6% for the Port Cities and 12.3% for the Range.

## Under Employment Indicators for those Currently Employed

Table 4 provides data on several indicators of under employment. Thirty-four percent of working respondents felt that their jobs do not use all of their work skills. They were asked to list the skills that they had that were unused and respondents listed, on average, 1.3 unused work skills (see Appendix B for a list). The Range and Port Cities' respondents did not differ significantly in this regard.

When asked how difficult it would be to get a job that used more of their work skills, 75% said it would be “very” or “somewhat” difficult or impossible to find such a job in Northeast Minnesota (or northwest Wisconsin for those respondents in Douglas County, Wisconsin). For 7.2% it was because they felt no such job was available in the region. These opinions varied by region with 79.3% of the respondents on the Range seeing difficulty in finding a suitable job compared to 67.6% for the Port Cities. Almost 9% of Range respondents said there were no jobs that would use more of their skills as compared to 4.4% for the Port Cities.

Over sixty percent (61.3%) of those who feel their jobs do not use all of their work skills said that they would be willing to change employment if a more suitable job became available (70% for Port Cities' respondents and 56.3% for Range area respondents). The average hourly wage they would be willing to accept to start a job that used more of their skills was \$12.40, a level that was similar between the Range and Port Cities. A quarter (25.8%) would be willing to drive 31 or more miles one way to such a job. Driving did not differ by region, implying that many Range respondents would not be willing to travel far to a more suitable job in the Port Cities, for example.

A majority of respondents would take a job using more of their skills even if it did not offer benefits. Almost 80% would not require life insurance, 55.4% would not require contributions to a retirement plan, 55.1% would not require medical coverage (62.7% for the Range and 44.6% for the Port Cities), and 45.3% would not require paid vacations (51.0% for the Range and 37.7% for the Port Cities). Thus workers appear to place considerable value in finding a job that uses their work skills more fully.

**Table 3**  
**Characteristics of Respondents Who Are Currently Employed**  
**Northeast Minnesota Workforce Survey, 2001<sup>7</sup>**

Item	Range	Port Cit- ies	Overall	sig <sup>8</sup>
Percent who ARE currently employed	60.1% (964)	71.3% (488)	63.8% (1452) <sup>9</sup>	sig
Among the currently employed				
Percent who are self-employed	17.6% (579)	13.5% (348)	16.1% (927)	ns
Percent who are "on call" (for example, a substitute teacher or trucker)	8.5% (579)	6.3% (348)	7.7% (924)	ns
Percent who are independent contractors	8.5% (579)	11.5% (348)	9.6% (926)	ns
Percent employed through a temporary agency (such as "Manpower" or "Temps")	0.9% (580)	0.6% (348)	0.8% (928)	ns
Average number of <i>different employers</i> respondents currently work for part-time or full-time including self-employed. (Range 1-7)	1.2 (579)	1.2 (348)	1.2 (927)	ns
Total hours worked per week, average	39.6 (566)	39.3 (344)	39.5 (911)	ns
Percent who changed employers during 2000	16.4% (579)	16.2% (346)	16.3% (925)	ns
Percent who have some job that pays more than \$10 per hour	68.2% (569)	72.0% (343)	69.6% (912)	ns
Percent who get any of the following fringe benefits from their jobs				
Medical coverage	58.9% (576)	62.7% (346)	60.3% (922)	ns
Life insurance	50.7% (574)	56.2% (345)	52.8% (919)	ns
Contributions to a retirement plan	60.6% (576)	59.8% (348)	60.3% (924)	ns
Paid vacation	64.2% (575)	66.8% (346)	65.1% (921)	ns
Percent distribution of the number of listed, currently held full or part- time jobs				
1	85.7%	80.4%	83.7%	
2	11.2	15.9	12.9	ns
3	2.9	2.9	2.9	
4	<u>0.2</u>	<u>0.9</u>	<u>0.4</u>	
	100%	100%	100%	
	(580)	(347)	(927)	
Average number of jobs listed	1.2 (579)	1.2 (348)	1.2 (927)	ns

<sup>7</sup> Data are from a stratified random sample of households (and a random 16+ year old within selected households) in the 7 counties of northeastern Minnesota, plus adjacent Crow Wing County, and Douglas County in northwestern Wisconsin where Superior, one of the Port Cities, is located. The telephone survey was conducted in the summer, 2001.

<sup>8</sup> The chi square or ANOVA test of significance was used. *Sig* indicates that the difference between Range and Port Cities respondents is statistically significant at the .05 level. *Ns* indicate the difference is not statistically significant.

<sup>9</sup> The number of cases that constitutes the base of percentages or averages is shown in parentheses

<i>Item</i>	<i>Range</i>	<i>Port Cities</i>	<i>Overall</i>	<i>sig</i>
How satisfied are you with your current work situation?				
Very satisfied	53.8%	56.5%	54.8%	
Somewhat satisfied	34.9	34.8	34.9	
Somewhat dissatisfied	9.0	7.0	8.3	ns
Very dissatisfied	<u>2.3</u>	<u>1.7</u>	<u>2.1</u>	
	100%	100%	100%	
	(580)	(347)	(921)	
Percent of employed who would like to change how much they work	37.1% (572)	35.2% (341)	36.4% (913)	ns
Desired type of change for those who would like to change how much they work.				
Work fewer different jobs	13.3% (211)	15.3% (118)	14.0% (329)	ns
Work fewer hours at the jobs you now have	62.7% (212)	70.0% (120)	65.4% (332)	ns
Work more hours at the jobs you now have	25.1% (211)	22.5% (120)	24.2% (331)	ns
Work at additional jobs either part-time or full-time	11.8% (211)	10.0% (120)	11.2% (331)	ns
Other changes	27.4% (212)	20.0% (120)	24.7% (332)	ns
Percent planning to quit some current job within the next year	12.3% (552)	17.6% (330)	14.3% (882)	sig
Percent currently looking for an additional full-time or part-time job				
Looking for a full-time	7.5%	7.5%	7.5%	
Looking for a part-time	7.4	8.1	7.7	
Not looking for a job	<u>85.1</u>	<u>84.4</u>	<u>84.8</u>	ns
	100%	100%	100%	
	(576)	(346)	(922)	

**Table 4**  
**Under-employment of Respondents Who Are Currently Employed**  
**Northeast Minnesota Workforce Survey, 2001<sup>10</sup>**

Item	Range	Port Cities	Overall	sig <sup>11</sup>
Percent who say that the jobs they now have DO NOT USE all of their work SKILLS	34.0% (570)	34.0% (344)	34.0% (914) <sup>12</sup>	ns
Average number of talents or skills listed (See Appendix B for list):	1.2 (203)	1.4 (121)	1.3 (324)	ns
How difficult would it be to get a job in northeast Minnesota (north-west Wisconsin for Wisconsin respondents) that matches up with more of your skills?				
Very difficult	33.7%	20.2%	28.7%	
Somewhat difficult	36.8	43.0	39.1	
Not very difficult	20.7	32.5	25.1	sig
Impossible because no such job is available	<u>8.8</u>	<u>4.4</u>	<u>7.2</u>	
	100%	100%	100%	
	(193)	(114)	(307)	
Percent who would be <i>willing to change employment</i> if a job using more of their work skills became available?	56.3% (190)	70.0% (110)	61.3% (300)	sig
Average lowest pay respondent would be willing to START at to take a job that used more of your skills (converted to hourly wage)	\$12.83 (99)	\$11.82 (73)	\$12.40 (173)	ns
What distance respondent would be willing to travel one-way to work?				
0-15 miles	18.1%	27.4%	21.9%	
16-30 miles	51.4	53.4	52.2	
31-60 miles	25.7	19.2	23.0	ns
61 miles or more	<u>4.8</u>	<u>0.0</u>	<u>2.8</u>	
	100%	100%	100%	
	(105)	(73)	(178)	
Percent who <i>would</i> take a job using more of their skills even if it did <i>not</i> offer:				
Medical coverage	62.7% (102)	44.6% (74)	55.1% (176)	sig
Life insurance	80.8% (104)	77.3% (75)	79.3% (179)	ns
Contributions to a retirement plan	61.2% (103)	57.1% (77)	59.4% (180)	ns
Paid vacation	51.0% (102)	37.7% (77)	45.3% (179)	sig

<sup>10</sup> Data are from a stratified random sample of households (and a random 16+ year old within selected households) in the 7 counties of northeastern Minnesota, plus adjacent Crow Wing County, and Douglas County in northwestern Wisconsin where Superior, one of the Port Cities, is located. The telephone survey was conducted in the summer, 2001.

<sup>11</sup> The chi square or ANOVA test of significance was used. *Sig* indicates that the difference between Range and Port Cities respondents is statistically significant at the .05 level. *Ns* indicate the difference is not statistically significant.

<sup>12</sup> The number of cases that constitutes the base of percentages or averages is shown in parentheses.



## Employment Preferences for Respondents Working or Seeking Work

Respondents, who were currently employed or, if unemployed, were interested in finding a job, were asked several questions about their preference for location of the job. Table 5 provides information on these items.

Over half would prefer the Duluth or Superior area (91.3% of those living in the Port Cities and 36.2% of those living on the Range). However 54.4% of those living on the range would prefer some area of Northeast Minnesota other than the Port Cities', compared to 28.9% of those living in the Port Cities. There appears to be more interest in moving into the Port Cities than in moving out in some other area of Northeast Minnesota. A quarter (26.5%) would take a suitable job if it were located in some other part of Greater Minnesota other than the Northeast (29.5% of those on the Range as compared to 21.1% of those in the Port Cities). More respondents, particularly those in the Port Cities, would take a suitable job outside Minnesota than would take a job in the Twin Cities metropolitan area. Twenty four percent would take a job outside Minnesota (20.9% for Range and 29.7% for Port Cities' respondents), compared to 14.4% who would prefer a job in the Twin Cities (12.5% for those on the Range and 17.6% for those in the Port Cities').

Those who would prefer a job to be in Northeast Minnesota (including the Port Cities) were asked if they would stay in the region for a suitable job even if it did not pay as much as they could make if they moved elsewhere. Overwhelmingly, respondents preferred to stay in the area even if it lowered their income. Seventy percent of those who would prefer a job in Duluth and 77.6% of those who would prefer a job elsewhere in Northeast Minnesota would take a lower income for a suitable job. These figures vary by region. For those who prefer a job in Duluth, 54.7% of those on the Range versus 80.2% of those living in the Port Cities say they would accept a lower salary. For those who prefer a job elsewhere in Northeast Minnesota, 79.6% of Range respondents and 25.0% of Port Cities respondents would accept a lower salary to take a suitable job.

Almost half (46.2%) of respondents would like to telecommute, connecting to their employer via a computer at home.

Less than ten percent (6.8%) of respondents plan to leave Northeast Minnesota (or western Wisconsin) in the next year, lower for Range respondents (5.8%) than for Port Cities' respondents (8.9%).

Within the last two years 8.2% of all respondents have registered for any state employment agency and, among these, 76.4% were currently registered. These figures do not vary significantly by region.

**Table 5**  
**Employment Preferences For Respondents Who Are Currently Employed or Who**  
**Are Unemployed And Express An Interest in Finding a Job**  
**Northeast Minnesota Workforce Survey, 2001<sup>13</sup>**

Item	Range	Port Cities	Overall	sig <sup>14</sup>
If a suitable job were available where would the respondent like that job to be located:				
In the Duluth or Superior area	36.2% (682) <sup>15</sup>	91.3% (389)	56.2% (1071)	sig
In another area within northeast Minnesota	54.4% (677)	28.9% (380)	45.2% (1057)	sig
In greater Minnesota but outside northeast Minnesota	29.5% (677)	21.1% (380)	26.5% (1057)	sig
In the Twin Cities metro area	12.5% (694)	17.6% (392)	14.4% (1086)	sig
Outside Minnesota	20.9% (681)	29.7% (377)	24.0% (1058)	sig
Among respondents who would like a job in Duluth/Superior or Northeast Minnesota:				
Percent who would stay in this region even if they were paid less than the wage they could get elsewhere?				
Prefer a job in Duluth	54.7% (234)	80.2% (328)	69.6% (562)	sig
Prefer a job in Northeastern Minnesota	79.6% (206)	25.0% (8)	77.6% (214)	sig
Percent who would you like to have a job where they worked at home by connecting to their employer through a computer?				
	47.1% (683)	44.6% (388)	46.2% (1071)	ns
Percent of <u>all respondents</u> who <i>plan to leave</i> Northeast Minnesota (or western Wisconsin for Douglas County respondents) in the next year?				
	5.8% (945)	8.9% (474)	6.8% (1419)	sig
Percent of all respondents who have registered with any state employment agency in the last two years.				
	8.6% (959)	7.4% (487)	8.2% (1446)	ns
Percent who are currently registered with any state employment agency among those ever registered in the past two years.				
	76.6% (77)	75.9% (29)	76.4% (106)	ns

<sup>13</sup> Data are from a stratified random sample of households (and a random 16+ year old within selected households) in the 7 counties of northeastern Minnesota, plus adjacent Crow Wing County, and Douglas County in northwestern Wisconsin where Superior, one of the Port Cities, is located. The telephone survey was conducted in the summer, 2001.

<sup>14</sup> The chi square or ANOVA test of significance was used. *Sig* indicates that the difference between Range and Port Cities respondents is statistically significant at the .05 level. *Ns* indicate the difference is not statistically significant.

<sup>15</sup> The number of cases that constitutes the base of percentages or averages is shown in parentheses.

**Table 6**  
**Respondent Licenses, Certificates and Skill Training**  
**Northeast Minnesota Workforce Survey, 2001**

Item	Range	Port Cities	Overall	sig
Percent who have ever had any job-related certificates, licenses or degrees? (See Appendix C for a listing)	54.0% (953)	57.5% (485)	55.2% (1438)	ns
Average number of degrees, licenses, certificates listed	1.6 (515)	1.7 (279)	1.7 (795)	ns
Percent of certificates that are <u>currently valid</u>	81.0% (804)	87.3% (463)	83.3% (1267)	--
Percent with valid certificates currently working in same field	50.0% (645)	58.4% (401)	50.1% (1046)	--
Percent of respondents who currently <u>work in their certified field</u>	40.4% (810)	50.1% (471)	44.0% (1281)	--
Percent who are you currently <u>taking courses or training programs</u> to update skills or gain new skills	18.5% (962)	25.9% (486)	21.0% (1448)	sig
Among those taking courses or training programs, how is this paid?				
At the work place	25.8%	21.0%	23.8%	
Reimbursed by employer	25.8	20.2	23.5	
Paid by respondent	33.7	46.8	39.1	ns
Other	<u>14.6</u>	<u>12.1</u>	<u>13.6</u>	
	100%	100%	100%	
	(178)	(124)	(302)	

## Licenses, Certificates and Skill Training

Table 6 and Appendix C provide information on licenses and certificates that respondents listed. Over half (55.2%) had some job-related certificate, license or degree and this did not differ significantly by area. On average respondents listed 1.7 such certificates and 83.3% of these were currently valid with half of the respondents working in the field relevant to that certification.

A fifth of respondents, more in the Port Cities (25.9%) than on the Range (18.5%), were currently taking courses or training programs to update or gain new work skills. Among these, 23.8% were taking the training in the work place, 23.5% were reimbursed for training taken elsewhere, and 39.1% were paying for their training themselves.

Specific licenses and certificates provided by respondents are listed in Appendix C together with information about the date they originated, whether they are currently valid and whether the respondent was using the certification by working in a related job.

All respondents were asked several types of questions on their interest and preparation in selected skills. Table 7 provides a summary of their responses by skill and Table 7a reorganizes the data to make comparisons among the skills somewhat easier.

Seventy percent or more have no interest in computer or electronic repair, machine or process control programming, repairing mechanical systems or selling to the general public. Somewhat fewer have no interest in software development and programming (62.5%), managing business operations (53.8%) or instructing others (43.6%). Finding information on the Internet has only 28.8% of all respondents who say they are not interested in that skill. For those items with a significant regional difference, respondents in the Port Cities express a higher level of having some interest in the skill.

Skills that are most likely to be current skills of respondents include finding information on the Internet (40.5%), instructing others (36.7%), summarizing data and writing a report (23.1%), managing business operations (22.0%), and selling to the general public (21.5%). Except for managing business operations, where there are significant differences between regions Port Cities' respondents have a higher percentage with the skill.

Skills that could be used with one or two-week brush-up training include finding information on the Internet (16.0%), software development and programming (12.0%) and managing business operations (11.4%). Again, a higher percentage of Port Cities' respondents would be able to use the skill with brush-up training as compared to Range respondents where there are statistically significant differences.

**Table 7**  
**Respondent Interest in Specified Skills**  
**Northeast Minnesota Workforce Survey, 2001<sup>16</sup>**

Item	Range	Port Cities	Overall	sig <sup>17</sup>
Finding information on the internet				
Skill I would like to learn but do not possess	5.9%	12.1%	14.6%	
Skill I could use if I had a week or two of training	5.8	16.5	16.0	
Current skill that needs no training	38.0	45.5	40.5	sig
No interest in learning this skill	<u>30.3</u>	<u>25.9</u>	<u>28.8</u>	
	100%	100%	100%	
	(955) <sup>18</sup>	(486)	(1441)	
Software development and programming				
Skill I would like to learn but do not possess	17.6%	20.6%	18.6%	
Skill I could use if I had a week or two of training	11.4	13.3	12.0	
Current skill that needs no training	7.0	6.4	6.8	ns
No interest in learning this skill	<u>64.0</u>	<u>59.7</u>	<u>62.5</u>	
	100%	100%	100%	
	(941)	(481)	(1442)	
Machine or process control programming				
Skill I would like to learn but do not possess	10.3%	13.6%	11.5%	
Skill I could use if I had a week or two of training	8.1	6.1	7.4	
Current skill that needs no training	4.0	5.5	4.5	ns
No interest in learning this skill	<u>77.6</u>	<u>74.8</u>	<u>76.7</u>	
	100%	100%	100%	
	(928)	(477)	(1405)	
Computer or electronic repair				
Skill I would like to learn but do not possess	12.3%	12.1%	12.3%	
Skill I could use if I had a week or two of training	4.5	7.0	5.3	
Current skill that needs no training	5.0	4.5	4.8	ns
No interest in learning this skill	<u>78.2</u>	<u>76.4</u>	<u>77.6</u>	
	100%	100%	100%	
	(965)	(487)	(1452)	
Summarizing data and writing a report				
Skill I would like to learn but do not possess	8.3%	10.3%	9.0%	
Skill I could use if I had a week or two of training	6.3	9.7	7.5	
Current skill that needs no training	22.3	24.6	23.1	sig
No interest in learning this skill	<u>63.0</u>	<u>55.4</u>	<u>60.5</u>	
	100%	100%	100%	
	(962)	(487)	(1449)	
Instructing others				

<sup>16</sup> Data are from a stratified random sample of households (and a random 16+ year old within selected households) in the 7 counties of northeastern Minnesota, plus adjacent Crow Wing County, and Douglas County in northwestern Wisconsin where Superior, one of the Port Cities, is located. The telephone survey was conducted in the summer, 2001.

<sup>17</sup> The chi square or ANOVA test of significance was used. Sig indicates that the difference between Range and Port Cities respondents is statistically significant at the .05 level. Ns indicate the difference is not statistically significant.

<sup>18</sup> The number of cases that constitutes the base of percentages or averages is shown in parentheses.

Skill I would like to learn but do not possess	10.5%	12.1%	11.0%	
Skill I could use if I had a week or two of training	7.8	10.5	8.7	
Current skill that needs no training	35.5	39.1	36.7	sig
No interest in learning this skill	<u>46.2</u>	<u>38.3</u>	<u>43.6</u>	
	100%	100%	100%	
	(956)	(486)	(1442)	
Repairing mechanical systems				
Skill I would like to learn but do not possess	8.9%	7.4%	8.4%	
Skill I could use if I had a week or two of training	5.7	5.5	5.7	
Current skill that needs no training	11.6	12.5	11.9	ns
No interest in learning this skill	<u>73.8</u>	<u>74.6</u>	<u>74.0</u>	
	100%	100%	100%	
	(957)	(488)	(1445)	
Selling to the general public				
Skill I would like to learn but do not possess	3.3%	6.2%	4.3%	
Skill I could use if I had a week or two of training	3.7	4.9	4.1	
Current skill that needs no training	21.3	22.1	21.5	sig
No interest in learning this skill	<u>71.7</u>	<u>66.8</u>	<u>70.0</u>	
	100%	100%	100%	
	(963)	(485)	(1448)	
Managing business operations				
Skill I would like to learn but do not possess	12.0%	14.4%	12.8%	
Skill I could use if I had a week or two of training	9.1	15.8	11.4	
Current skill that needs no training	22.2	21.6	22.0	sig
No interest in learning this skill	<u>56.7</u>	<u>48.1</u>	<u>53.8</u>	
	100%	100%	100%	
	(965)	(486)	(1451)	
Percent currently “very” or “somewhat” skilled in selected areas:				
Algebra	55.3% (962)	59.8% (482)	56.8% (1444)	sig
Calculus	15.1% (962)	19.5% (486)	16.7% (1448)	ns
Figuring out technical problems	62.2% (949)	65.6% (479)	63.3% (1428)	sig
Knowledge in biology, physics or another physical science	45.8% (962)	51.2% (486)	47.6% (1448)	ns
Any computer programming language	27.0% (965)	26.8% (488)	26.9% (1453)	ns
Managing technical work teams	34.7% (945)	36.9% (485)	35.4% (1430)	ns

**Table 7a**  
**Interest in Selected Skills for All Respondents – Reorganized Data**  
**Northeast Minnesota Workforce Survey, 2001**

Item	Range	Port Cities	Overall	sig
<i>Respondent has <u>no interest in learning this skill</u></i>				
Finding information on the Internet	30.3%	25.9%	28.8%	sig
Software development and programming	64.0%	59.7%	62.5%	ns
Machine or process control programming	77.6%	74.8%	76.7%	ns
Computer or electronic repair	78.2%	76.4%	77.6%	ns
Summarizing data and writing a report	63.0%	55.4%	60.5%	sig
Instructing others	46.2%	38.3%	43.6%	sig
Repairing mechanical systems	73.8%	74.6%	74.0%	ns
Selling to the general public	71.7%	66.8%	70.0%	sig
Managing business operations	56.7%	48.1%	53.8%	sig
<i>A <u>current skill</u> for which respondents would <u>need no training</u></i>				
Finding information on the Internet	38.0%	45.5%	40.5%	sig
Software development and programming	7.0%	6.4%	6.8%	ns
Machine or process control programming	4.0%	5.5%	4.5%	ns
Computer or electronic repair	5.0%	4.5%	4.8%	ns
Summarizing data and writing a report	22.3%	24.6%	23.1%	sig
Instructing others	35.5%	39.1%	36.7%	sig
Repairing mechanical systems	11.6%	12.5%	11.9%	ns
Selling to the general public	21.3%	22.1%	21.5%	sig
Managing business operations	22.2%	21.6%	22.0%	sig
<i>Skills that the respondent <u>could use with a week or two of training</u></i>				
Finding information on the Internet	5.8%	16.5%	16.0%	sig
Software development and programming	11.4%	13.3%	12.0%	ns
Machine or process control programming	8.1%	6.1%	7.4%	ns
Computer or electronic repair	4.5%	7.0%	5.3%	ns
Summarizing data and writing a report	6.3%	9.7%	7.5%	sig
Instructing others	7.8%	10.5%	8.7%	sig
Repairing mechanical systems	5.7%	5.5%	5.7%	ns
Selling to the general public	3.7%	4.9%	4.1%	sig
Managing business operations	9.1%	15.8%	11.4%	sig
<i>Skills that the respondent <u>would like to learn</u> but does not now possess</i>				
Finding information on the Internet	5.9%	12.1%	14.6%	sig
Software development and programming	17.6%	20.6%	18.6%	ns
Machine or process control programming	10.3%	13.6%	11.5%	ns
Computer or electronic repair	12.3%	12.1%	12.3%	ns
Summarizing data and writing a report	8.3%	10.3%	9.0%	sig
Instructing others	10.5%	12.1%	11.0%	sig
Repairing mechanical systems	8.9%	7.4%	8.4%	ns
Selling to the general public	3.3%	6.2%	4.3%	sig
Managing business operations	12.0%	14.4%	12.8%	sig

Overall, for respondents without the skill, 18.6% would like to learn software development and programming, 14.6% would like to learn how to use the internet to find information, 12.8% would like to learn how to manage business operations, 12.3% would like to learn how to repair computer or electronic equipment, and 11.5% would like to learn machine or process control programming. Only 4.3% would like to learn how to sell to the general public. Where there are significant differences, a higher percentage of Port Cities' respondents would like to learn the skill.

Finally, the last panel of Table 7 shows self-ratings of skill in six knowledge areas. The highest rating is for figuring out technical problems where 63.3% of respondents felt they were very or somewhat skilled (65.6% for the Port Cities and 62.2% for the Range). Algebra was an area in which 56.8% of respondents felt very or somewhat skilled (59.8% for Port Cities' respondents and 55.3% for Range respondents). Knowledge some physical science such as biology or physics had almost half of respondents (47.6%) say they felt they were very or somewhat skilled. Areas where respondents felt the least skilled were calculus (16.7% very or somewhat skilled), knowledge of any computer programming language (26.9%), and managing technical work teams (35.4%).

## Work Ethic Attitudes Scale

Four attitude questions were asked about work ethic beliefs and responses to these were summed to form a work ethic scale. Results are shown in Table 8. Overall, on a scale from 4 to 16, where 16 indicates the strongest agreement with each of the four work ethic items, these respondents have an average score of 12.5. This reflects the rather high agreement with each work ethic item. The only item for which there is a significant difference between regions is "A good indication of a man or woman's worth is how well they do their job." Here a somewhat higher percentage of Range area respondents strongly agree (32.2% vs. 25.1% for the Port Cities) and a somewhat larger percentage of Port Cities' respondents disagree or strongly disagree (18.0% vs. 14.7% for the Range).



**Table 8**  
**Work Ethic Scale Responses for All Respondents**  
**Northeast Minnesota Workforce Survey, 2001<sup>19</sup>**

Item	Range	Port Cities	Overall	sig <sup>20</sup>
Hard work makes a man or woman a better person				
Strongly agree	34.7%	32.4%	33.9%	
Agree	58.0	59.3	58.4	ns
Disagree	6.6	7.0	6.7	
Strongly disagree	<u>0.8</u>	<u>1.3</u>	<u>0.9</u>	
	100% (931) <sup>21</sup>	100% (472)	100% (1403)	
Wasting time is as bad as wasting money.				
Strongly agree	33.0%	30.8%	32.3%	
Agree	52.6	51.1	52.1	ns
Disagree	12.0	16.7	13.6	
Strongly disagree	<u>2.3</u>	<u>1.5</u>	<u>2.1</u>	
	100% (938)	100% (468)	100% (1406)	
A good indication of a man or woman's worth is how well they do their job.				
Strongly agree				
Agree	32.2%	25.1%	29.8%	sig
Disagree	53.2	56.8	54.4	
Strongly disagree	13.3	15.7	14.1	
	<u>1.4</u>	<u>2.3</u>	<u>1.7</u>	
	100% (933)	100% (470)	100% (1403)	
If all other things are equal it is better to have a job with a lot of responsibility than one with little responsibility.				
Strongly agree	20.5%	23.3%	21.5%	
Agree	55.9	52.9	54.9	ns
Disagree	21.8	22.2	21.9	
Strongly disagree	<u>1.8</u>	<u>1.5</u>	<u>1.7</u>	
	100% (896)	100% (454)	100% (1350)	
Average work ethic summated scale score (range 4-16, 16 is high)	12.6 (851)	12.4 (437)	12.5 (1288)	ns

<sup>19</sup> Data are from a stratified random sample of households (and a random 16+ year old within selected households) in the 7 counties of northeastern Minnesota, plus adjacent Crow Wing County, and Douglas County in northwestern Wisconsin where Superior, one of the Port Cities, is located. The telephone survey was conducted in the summer, 2001.

<sup>20</sup> The chi square or ANOVA test of significance was used. Sig indicates that the difference between Range and Port Cities respondents is statistically significant at the .05 level. Ns indicate the difference is not statistically significant.

<sup>21</sup> The number of cases that constitutes the base of percentages or averages is shown in parentheses.

## Appendices<sup>22</sup>

- A. List of Work Skills that Unemployed Respondents Would Like to Use
- B. List of Unused Work Skills Currently Employed Respondents Want to Use
- C. List of Licenses, Certificates and Degrees Held By Respondents

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<sup>22</sup> Note that the following listings are NOT weighted. It is a list of all items mentioned. The listing should not be considered to be statistically “representative” of the Port Cities or Range since it is not weighted to reflect sampling stratification.

# Appendix A

## List of Work Skills That Unemployed Respondents Would Like to Use

### Range Region:

ACCOUNTING  
ACCOUNTING8  
ACCOUNTING  
ARCHITECTURE,DRAWING,PLANS.  
ART  
ARTIST (STAINED GLASS)  
AUTO MECHANIC SKILLS  
AUTOMOTIVE  
BARTENDING  
BI-LINGUAL (ENGLISH/GERMAN/)  
BOOKKEEPING  
BRICK LAYER  
BUILDING HOUSES  
BUSINESS  
BUSINESS (ACCOUNTING)  
BUSINESS OWNER  
BUSINESS SKILLS  
BUSINESS SKILLS  
CAKE DECORATING  
CARPENTRY  
CARPENTRY  
CARPENTRY  
CARPENTRY  
CARPENTRY  
CARPENTRY  
CARPENTRY SKILLS  
CASHIER  
CASHIERING  
CHIEF ENGINEERS LICENSE  
CHILDCARE WORKER  
CLEANING SKILLS  
CLERICAL SKILL  
COMMUNICATION  
COMPUTER  
COMPUTER  
COMPUTER  
COMPUTER (TYPING)  
COMPUTER (WORKING ON ENHANCING)  
COMPUTER FIXING  
COMPUTER PROGRAMMING  
COMPUTER SKILL  
COMPUTER SKILLS  
COMPUTER SKILLS  
COMPUTER SKILLS  
COMPUTER SKILLS  
COMPUTER SKILLS  
COMPUTER SKILLS  
COMPUTER SKILLS (WEB PAGE)  
COMPUTER TRAINING  
COMPUTER/SECRETARIAL SKILLS  
COMPUTERS  
CONSTRUCTION  
CONSTRUCTION  
CONSTRUCTION SKILLS  
COOKING  
COOKING  
COOKING  
COOKING  
COOKING SKILLS  
CPR

CRAFTS (QUILTS, UMBROIDERY) (ELSE)  
CRAFTS WITH KIDS  
CROCHETING  
CUSTOMER SERVICE  
CUSTOMER SERVICES SKILL  
DANCE  
DESIGN SKILLS  
DIFFERENT ART SKILLS  
- SALES WORK (ELSE)  
EDUCATION  
ELECTICAL  
ELECTRICAL  
ELECTRICAL ASSEMBLY  
ELECTRICAL WORK  
ELECTRICIAN  
ELECTRONICS  
EMT  
EQUIPMENT OPERATOR SKILL  
EXTENSIVE KNOWLEDGE-INSTALLATION SOFTWARE  
FACTORY WORK  
FARMING  
FINANCIAL SERVICES  
GARDENING  
GARDENING  
GENERAL BOOKKEEPING  
HEAVY EQUIPMENT OPERATOR  
HOME HEALTH CARE  
HOME MANAGEMENT  
HOMEMAKER  
HOSPITAL UPKEEPING  
HOUSE CLEANING  
INSTRUCTING OTHERS  
INTERNET  
INVENTIVE SKILLS  
KNIT, SEWING  
KNITTING  
KNOWLEDGE OF WORLD ENERGY PETROLEUM  
LABOR  
LAW ENFORCEMENT-DISPATCH  
LEGAL KNOWLEDGE (ELSE)  
LOAD SOFTWARE  
LOGGER  
MACHINERY  
MACHINES  
MACHINIST  
MANAGEMENT  
MANAGERIAL SKILLS  
MANAGERIAL SKILLS  
MARKETING DEGREE  
MATH  
MATH  
MATH & FIGURES  
MATH SKILLS  
MECHANIC  
MECHANICAL  
MECHANICAL  
MECHANICS  
MECHANICS  
MEDICAL CLAIMS  
MEDICAL FIELD SKILLS  
MERCHANDIZING  
MILL WRIGHT  
MOBILE TRAINING INSTRUCTING ON AIRCRAFT  
MOM  
MONEY MANAGEMENT  
MUSIC  
MUSIC

NURSES AID  
NURSING  
NURSING ASSISTANT  
NURSING SKILLS  
OFFICE (ADMINISTRATION)  
OFFICE CLERICAL  
OFFICE WORK  
OPERATING HEAVY MACHINERY  
OUTDOOR THINGS  
PEOPLE SKILLS  
PEOPLE SKILLS  
PERSONNEL DEPT  
PHOTOGRAPHY  
POWER TOOL SKILLS & DRILLING SKILLS  
PUBLIC RELATIONS  
QUALITY CONTROL  
QUILTING  
QUITLING (ELSE)  
READ BLUE PRINTS  
REAL ESTATE  
RECEPTION SKILLS  
RUBBER STAMPING  
RUNNING EQUIPMENT  
SAID COULDN'T THINK OF ANY  
SALES  
SALES-STOCKING SHELVES  
SECRETARIAL  
SECRETARIAL  
SECRETARIAL  
SECRETARIAL SKILLS  
SECRETARY DUTIES  
SERVING  
SEWING  
SOCIAL SKILLS  
SOCIAL SKILLS  
SOCIAL WORK  
SPORTS/ATHLETICS  
TAKING CARE OF PEOPLE  
TEACHING  
TEACHING  
TEACHING (ELSE)  
TEACHING (ELSE)  
TEACHING SKILLS  
TECHNICAL SUPPORT ON COMPUTERS  
TECHNICAL WORK  
TIRES BUSINESS  
TROUBLE SHOOTING IN COMPUTERS  
TRUCK DRIVING SKILL  
USING THE INTERNET  
USING THE INTERNET  
VETERANIAN TECHNICIAN  
WAITRESS WORK  
WELD  
WELDER  
WELDING  
WELDING  
WELDING  
WOOD WORK  
WOOD WORKING  
WOOD WORKING SKILLS  
WORK OUTSIDE  
WORKING WITH CHILDREN  
WORKING WITH CHILDREN  
WORKING WITH DEVELOPMENTALLY DISABLED  
WORKING WITH DEVELOPMENTLY DISABLED  
WRITING SKILLS  
WRITING

# Appendix A

## List of Work Skills that Unemployed Respondents Would Like to Use (continued)

### Port Cities:

ACCOUNTING  
ACCOUNTING  
ADMINSTRATION (MANAGERIAL)  
AIR CONDITIONING REPAIR  
ART SKILLS (QUILTING SKILLS)  
AUTOMOTIVE  
AVIANIKS (IN GERMANY)  
BASIC RECEPTIONIST  
BOOKKEEPING  
BRICK LAYING  
BUILDING (CONSTRUCTION)  
CARPENTRY (ELSE) NO  
CASHIERING  
CHARTING  
COLLGE GRADUATE  
COMPUTER  
COMPUTER AUTOMATIONS  
COMPUTER SKILLS  
COMPUTER SKILLS  
COMPUTER TECHNOLOGY  
COMPUTER USE  
COMPUTERS  
COMPUTERS  
CONSTRUCTION  
COOKING SKILLS  
CREATIVITY  
CUSTOMER SERVICE  
CUSTOMER SERVICE SKILLS  
DESKTOP PUBLISHING!  
(ANY) (SURE)  
DRAWING  
DRIVING SKILLS  
ELECTRONICS  
FAX MACHINES USE  
FUELING AIRPLANES (MORE)  
GROUP WORK  
HAIRDRESSING  
HARDWARE &  
HEALTH CARE ADMINISTRATOR  
HEAVY EQUIPMENT AREA  
INTERNET SURFING (SKILL)  
JANITORIAL SKILLS  
KNOW HISTORY/POLITICAL SCIENCE  
LARGE VOCABULARY  
LEADERSHIP SKILLS  
MAINTENANCE SKILLS  
MANAGEMENT SKILLS  
MANAGEMENT SKILLS (ELSE)  
MARKETING  
MECHANICAL (ELSE) NO  
MEDICAL CHARTING SKILLS  
MEDICAL LAB WORK  
NURSE ASSISTANT  
NURSING  
OCCUPATIONAL THERAPY-PEOPLE CARE  
OFFICE WORK SKILLS

OFFICE WORK-COMPUTER/CALCULATOR PHONE  
ORGANIZATIONAL SKILLS  
OUTDOOR SKILLS  
PARAMEDIC  
PEOPLE SKILLS  
PEOPLE SKILLS  
PERSONAL RELATION SKILLS  
PHILOSOPHY  
PHOTOGRAPHY  
PRESENTATION SKILLS  
PRINTING  
PUBLIC SPEAKING SKILLS  
PUNCTUAL  
RAILROAD WORKER  
READING SKILLS  
RECEPTIONIST SKILLS (TYPING)  
REFRIGERATOR REPAIR  
SALES  
SALES  
SALES (ELSE)  
SALES SKILLS  
SCIENCE SKILLS DUE TO BIOLOGY DEGREE  
SECRETARIAL SKILLS  
SOCIOLOGY  
TEACHING  
TEACHING (SORT OF)  
TEACHING SKILLS  
TYPING  
TYPING  
VERBAL SKILLS  
WAITRESS SKILLS  
WDS NURSE  
WELDING  
WORK WELL WITH OTHERS  
WORKING ON CARS  
WORKING ON COMPUTERS  
WORKING W/SMALL ANIMALS  
WORKING WITH KIDS  
WRITING SKILLS  
WRITTEN & ORAL COMMUNICATION SKILLS

## Appendix B

### List of Unused Work Skills Currently Employed Respondents Want to Use

#### **RANGE REGION:**

ACCOUNTING  
ACCOUNTING  
ACCOUNTING  
ACCOUNTING  
ACCOUNTING SKILLS  
ACTING  
ADMINISTRATIVE  
ADVERTISING  
ARCHITECTURAL  
ART  
ART





CONSTRUCTION  
CONSTRUCTION SKILLS  
COOKING  
COSMETOLOGIST  
COUNSELING  
CRAFTS  
CREATIVITY  
CREATIVITY  
CREATIVITY  
CUSTOMER SERVICE  
CWC BREAK PRESS IN PRECISION SHEET METAL  
DATA ENTRY  
DAYCARE  
DENTAL ASSISTING  
DESIGN  
DESIGNING  
DISWASHING  
MANAGERIAL  
WRITING  
DOG GROOMING  
DOG GROOMING  
DOMESTIC SKILLS-THAT SHE FINDS AS HOBBIE  
DON'T KNOW  
DRAFTSMAN  
DRIVING A FORK TRUCK  
ENGINEERING  
ENGINEERING  
ENGINEERING SKILLS  
ENGLISH DEGREE-LIKE TO DO PRESENTATIONS  
ENVIRONMENTAL SKILLS KNOWLEDGE  
FILM  
FLIGHT TRAINING  
FOREIGN LANGUAGE  
FRENCH LANGUAGE  
FUR BUYER  
GOLF  
GOOD SOCIAL SKILLS  
GRANT WRITING FOR NONPROFIT ORGANIZATION  
GUNSMITH  
HANDY MAN STUFF  
HARD TO ANSWER-WORK W/ HANDS  
HEAVY EQUIPMENT OPERATIONS  
HELP PEOPLE  
HOME IMPROVEMENT "HANDYMAN"  
HYDRAULIC REPAIR  
I USED TO BE A HELICOPTER MECHANIC  
INTERNET  
INTERPERSONAL SKILLS  
INTERVIEWING  
IRRIGATION INSTALLATION & REPAIR  
JET ENGINE MECHANIC  
KNOW COMPUTERS  
KNOWLEDGE OF ELECTRONICS  
LANDSCAPING  
LAW ENFORCEMENT  
LEADERSHIP  
LEADERSHIP  
LEADERSHIP  
LEGAL SKILLS  
LOGISTICS  
LOGGER  
MACHINE SKILLS  
MACHINIST  
MACHINISTS  
MAINTENANCE  
MAINTENANCE WORK  
MANAGEMENT  
MANAGEMENT

MANAGEMENT  
MANAGEMENT  
MANAGEMENT  
MANAGEMENT  
MANAGEMENT SKILLS  
MANAGEMENT SKILLS  
MANAGEMENT SKILLS  
MANAGEMENT WORK EXPERIENCE  
MANAGER  
MATH  
MATHEMATICS  
MECHANIC (TRUCK-DIESEL)  
MECHANICAL  
MECHANICAL  
MECHANICAL ENGINEERING  
MECHANICAL SKILL  
MECHANICS  
MEDICAL ASSISTANT  
MEDICAL FIELD  
MEDICAL SECRETARY SKILLS  
MERCHANDISING BUYER  
MILITARY SKILL  
MIND WORE  
MORE AUTHORITY  
MORE COMPUTER SKILLS  
MORE HANDS ON WITH KIDS  
MORE OF MY INTELLIGENCE  
MORE RECREATION GROUND WORK WITHIN FOREST  
MORE USE OF MY EDUCATION  
MUSIC SKILLS  
NATIONAL RESOURCES TALENTS  
NETWORKING  
NEWSPAPER  
NONE  
NONE  
NON-PROFIT MANAGEMENT SKILLS  
NOT SURE  
NOT SURE NOW  
NOTHING  
NOTHING ELSE  
NURSING SKILLS  
OFFICE SKILLS (TYPING, FILING ETC)  
ON COMPUTER  
OPERATIONS  
OPERATOR  
OPERATOR (EQUIPMENT)  
ORGANIZATIONAL  
OUTSIDE WORK  
PAINTING BUILDINGS  
PATIENT CARE  
PEOPLE SKILLS  
PEOPLE SKILLS  
PEOPLE SKILLS  
PEOPLE SKILLS-COMMUNICATION  
PHOTOGRAPHY  
PHYSICAL LABOR  
PHYSICAL LABOR  
PHYSICAL LABOR/MANUAL  
PILOTING  
PLANNING  
PRACTICAL ENGINEERING (DESIGN)  
PROBLEM SOLVING  
PROBLEM-SOLVING  
PROFESSIONAL SKILLS  
PROGRAM DEVELOPMENT & MANAGEMENT  
PSYCHOLOGY  
PUBLIC RELATIONS EXPERIENCE

RACING SKILLS  
REAL ESTATE  
RECORDING  
RESEARCH  
RESEARCH & CONSULTING  
RESTORE OLD MOTORCYCLES  
SALES  
SALES MAN  
SALES POSITIONS  
SCIENCE  
SECRETARIAL SKILLS  
SERVING, COOKING, GARDEN  
SHE'S A FEMALE IN A MAN'S WORK PLACE  
SKIPPED IT  
SOCIAL SKILLS  
SOCIAL SKILLS  
SOCIAL SKILLS  
SOCIAL SKILLS  
SOCIAL WORK  
SOCIAL WORK  
STAND-UP COMEDIAN  
SUPERVISOR  
SUPPLY CHAIN CONSULTING  
TEACHER  
TEACHING  
TEACHING  
TEACHING  
TEACHING  
TEACHING CERAMICS  
TEACHING SKILLS  
TRUCK DRIVING  
TYPING SKILLS  
USER EDUCATION  
VISUAL ARTS  
WAITERING  
WEATHER FORECASTING CERTIFIED  
WEB DESIGN  
WELDING  
WELDING  
WELDING SKILLS  
WOODWORKING  
WOODWORKING  
WORK WITH MORE PEOPLE  
WORKING W/EQUIPMENT  
WORKING WITH METAL  
WORKING WITH CHILDREN  
WORKING WITH PEOPLE  
WORKING WITH PEOPLE  
WOULD LIKE MORE MATH SKILLS  
WRITING  
WRITING SKILL  
WRITING SKILLS IN ENGLISH  
WRITING-GRANT WRITING

Appendix B  
List of Unused Work Skills Currently Employed Respondents  
Want to Use (continued)

**PORT CITIES REGION:**

ACCOUNTING  
ACCOUNTING  
ACCOUNTING  
ANTHROPOLOGY  
ARCHITURE  
ARTISTIC  
ARTISTIC TALENTS - HANDS ON  
ASSESSMENT SKILLS  
BABYSITTING  
BEAUTICIAN  
BEING ABLE TO USE HOBBY THINGS  
BOOKKEEPING  
BRAIN POWER-THINKING SKILLS  
CARPENTRY  
CARPENTRY  
CARPENTRY  
CATCH FISH  
CERT. MEDICAL ASSISTANT  
CERTIFIED FOR K-6  
CERTIFIED NURSING ASSISTANT  
CERTIFIED TO TEACH DRIVERS TRAINING  
CHEMISTRY  
CLEANING-MAINTANING  
CLERICAL SKILLS  
CLINICAL PHARMACY  
COMMUNICATION  
COMMUNICATION  
COMPUTER  
COMPUTER  
COMPUTER  
COMPUTER NETWORKING  
COMPUTER SKILL  
COMPUTER SKILL  
COMPUTER SKILLS  
COMPUTER SKILLS  
COMPUTER SKILLS  
COMPUTER SKILLS  
COMPUTER SKILLS  
COMPUTER SKILLS  
COMPUTER SKILLS  
COMPUTER SKILLS  
COMPUTER SKILLS  
COMPUTER SKILLS  
COMPUTER SKILLS  
CONSTRUCTING & MANUFACTURING  
CONSTRUCTION TRADE  
CONSULTATION  
COOK  
COOKING/CANNING  
COUNSELING  
COUNSELING ABILITY  
COUNSELING SKILLS  
CRAFT SKILLS  
CRAFT SKILLS  
CRAFTSWORKING  
CUSTOMER SERVICE  
CUSTOMER SERVICE  
DATA ENTRY  
DECORATING SKILLS

DENTAL LAB TECHNICAL  
DESIGN SKILLS - GRAPHIC  
DESIGN SKILLS  
ANYTHING  
JUST LOOKING FOR SOME EXTRA INCOME  
DRIVING A TRUCK  
EDUCATIONAL SKILLS LIKE PSYCHOLOGY  
ELECTRICAL  
ELECTRONIC-COMPUTERS  
ELECTRONICS  
ELECTRONICS  
ENGINES  
FIRE FIGHTING  
FRONT DESK  
GARDEN SKILLS  
GARDENING  
GOOD AT NUMBERS  
GOURMENT COOKING  
HEAVY EQUIP  
HEAVY MACHINE OPERATION  
HOTEL MANAGEMENT  
HOUSEKEEPING  
HUMAN RESOURCES SKILLS  
IMAGINATION SKILLS  
INTERIOR DECORATION  
INTERNET RESEARCHING  
INTERVIEWING SKILLS  
JANITORIAL SKILLS  
KEYBOARDING  
LAW ENFORCEMENT  
LESSON PLANNING  
LOAN FILER  
MANAGEMENT  
MANAGEMENT  
MANAGEMENT  
MANAGEMENT SKILL  
MANAGEMENT SKILLS  
MANAGERIAL SKILLS  
MANAGERIAL SKILLS  
MANAGERIAL-DECISION MAKING  
MARKETING  
MARKETING MANAGEMENT  
MASSAGE  
MASTERS DEGREE  
MATH  
MATH  
MATH  
MATH  
MECHANICAL (AUTO REPAIR)  
MECHANICAL  
MECHANICS  
MECHANICS  
MECHANICS  
MORE BOOKKEEPING  
MORE CARPENTRY  
MORE HANDS ON WORK DEALING WITH PEOPLE  
MORE MARKETABLE SKILLS  
MORE PEOPLE SKILLS  
MORE PHYSICAL  
MUSIC TALENTS  
MY EDUCATION-HAS 4YEAR COLLEGE DEGREE  
NOTHING IN PARTICULAR  
NURSE PRACTITIONER-MORE EDUCATION  
NURSING SKILLS  
OFFICE WORK  
ON HAND NURSING SKILLS  
OPERATE MACHINERY  
ORGANIZATIONAL

ORGANIZING AND PLANNING  
 PAINTING & REMODELING  
 PATIENTS CARE  
 PEOPLE SKILLS  
 PEOPLE SKILLS  
 PLANTING  
 PLUMBING  
 POLITICAL THINGS  
 PROGRAMMING  
 PUBLIC SPEAKING  
 PUBLIC SPEAKING  
 READING ABILITY  
 ROOFING EXPERIENCE  
 SALES  
 SECOND LANGUAGE  
 SECRETARIAL  
 SEWING/REUPHOLSTERY  
 SHORTHAND  
 SOCIAL WORK  
 SOMETHING W/MORE INTERPERSONAL SKILLS  
 SPEAK COMMUNICATION  
 STEEL WORKER  
 SUPERVISING SKILL  
 SUPERVISOR SKILLS  
 SUPERVISORY  
 SUPERVISORY SKILLS  
 TEACHING  
 TEACHING  
 TEACHING  
 TEACHING  
 TEACHING SKILL  
 TECHNICAL SKILLS  
 TOTAL PARENTAL NUTRITION  
 TRAINING SKILLS/TEACHING  
 TRAVELING  
 TRIVIA  
 TYPING  
 USING INTERNET  
 WAITING  
 WORK W/DISABLED PEOPLE  
 WORK WITH BIOLOGY & RESEARCHING SKILLS  
 WORK WITH DISABLED  
 WORKING WITH KIDS  
 WRITING  
 WRITING

## Appendix C

### List of Licenses, Certificates and Degrees Held By Respondents

#### RANGE REGION:

<u>Certificate, License or Degree Held</u> <u>Certificate</u>	<u>Year Received</u>	<u>Now Valid?</u>	<u>Work in Job Requiring this</u>
(CERT.) DENTAL ASSIST	1970	Yes	Yes
2 CRIMINAL DEGREE	1993	Yes	No
2 MANAGMENT DEGREE	1995	Yes	Yes
2 YR ACCOUNTING CERT	1970	Yes	No
2 YR SOCIAL SERVICES	1993	Yes	Yes
2YR ACCOUNTING CLERK DEG	1990	Yes	No

2-YR COLLEGE DEGREE	2000	Yes	No
3RD CLASS BROADCASTING LI	1977	No	No
A.S	1961	Yes	No
A+ ELECTRONIC CERT.	1980	Yes	No
AA (GENERAL)	2000	Yes	Yes
AA ASSOCIATE ARTS	1992	Yes	Yes
AA DEGREE	1998	Yes	Yes
AA DEGREE	1981	Yes	No
AA DEGREE	1987	Yes	No
AA DEGREE CONSULT&SOC WRK	1978	Yes	No
AA DEGREE IN ACCOUNTING	1981	Yes	Yes
AA DEGREE IN ADMINISTRATI	1985	Yes	No
AA IN NURSING	1980	Yes	Yes
AAS	1996	Yes	Yes
AAS NATURAL RESOURCE MGMT	1991	Yes	Yes
ACCOUNTING	1986	Yes	No
ACCOUNTING (2 YRS)	1985	Yes	Yes
ACCOUNTING AA	1978	Yes	No
ACCOUNTING AUDITOR	1962	No	No
ACCOUNTING CERTIFICATE	1980	Yes	No
ACCOUNTING LICENSE	1970	Yes	Yes
ACLF	1983	Yes	Yes
ADULT INFANT & CPR ADULT	1997	Yes	Yes
ADVANCED SKILL TRAINING	1996	No	No
AGRICULTURE DEGREE	1950	Yes	Yes
AIRCRAFT MAINTENANCE CERT	1990	Yes	Yes
AIRFRAME POWER PLANT MECH	1983	Yes	Yes
ALISON SHADE RANGER CER M	1985	No	No
AMATUER RADIO LICENSE	1984	Yes	No
ARCHITECTURAL DRAFTING	1972	Yes	No
AS DEGREE	1989	Yes	No
ASA IN LIBERAL ARTS	1998	Yes	No
ASBESTOS REMOVAL CERT	1992	No	No
ASC IN DIESEL MECHANIC	1988	No	No
ASE AUTO MECHANICS	1988	No	No
ASSESSOR	1975		No
ASSOC ARTS DEGREE BUS ACT	1982	Yes	Yes
ASSOC BUSINESS DEGREE	1989	Yes	Yes
ASSOC DEG BUS SEC WORK	1950	Yes	No
ASSOC DEGREE GENL EDU	1951	Yes	No
ASSOC DEGREE IN BILO SCIE	1981	Yes	Yes
ASSOC DEGREE IN LAW ENFOR	1984	Yes	Yes
ASSOC DEGREE IN NURSING	1981	Yes	Yes
ASSOC IN FIRE TECHNOLOGY	1993	Yes	Yes
ASSOC IN SCIENCE/FORESTRY	1991	Yes	Yes
ASSOC OF ARTS	1959	Yes	No
ASSOC. DEGREE EDUCATION	1952	Yes	No
ASSOCIATE DEGREE	1990	Yes	No
ASSOCIATE IN ARTS	1990	Yes	No
ASSOCIATE IN SCIENCE	2001	Yes	No
ASSOCIATE OF ARTS	1999	Yes	No
ASSOCIATE OF ARTS	1983	Yes	No
ASSOCIATE OF ARTS DEGREE	1965	Yes	No
ASSOCIATED ARTS	1969	Yes	No
ASSOCIATES ARTS DEGREE	1968	No	No
ASSOCIATES DEGREE	2000	Yes	Yes
ASSOCIATES DEGREE	1970	Yes	No
ASSOCIATES DEGREE	1985	No	No
ASSOCIATES OF ARTS	1995	Yes	Yes
ASSOCIATES DEGREE	1940		No
AUTO ELECTRIC & ENGINE TU	1966	No	No
AUTO MECHANICS	1972	No	No
AUTO MECHANICS CERT.	1960	No	No
AUTOMOTIVE FIELD	1952	No	Yes
AUTOMOTIVE MECHANIC	1980	Yes	No
AUTOMOTIVE MECHANIC CERT	1950	Yes	No
AUTOMOTIVE TRAINING	1970		No
B M EDUCATION PUBLIC ADM	1965	Yes	No

B S	1964	Yes	No
B.A IN AAS	1974	No	No
B.A IN PUBLIC HEALTH	1959	Yes	No
B.A IN SCIENCE & ELEM ED	1976	No	No
B.A. (SPEECH COMMUNATIONS	1970	Yes	Yes
B.A. IN POLI. SCIENCES	1942	Yes	Yes
B.A. PHISIOLOGY	1995	Yes	Yes
B.A. POLITICAL SCIENCE	1998	Yes	Yes
B.S IN ELEMENTARY EDUCATI	1962	No	No
B.S.	1979	Yes	Yes
B.S.C.	1974	Yes	Yes
BA	1993	Yes	Yes
BA	1970	Yes	Yes
BA	1959	Yes	No
BA	1959	Yes	No
BA	1961	Yes	No
BA	1962	Yes	No
BA - ELEMENTARY ED	1965	Yes	No
BA - PSYCH	1991	Yes	Yes
BA (ANTHROPOLOGY)	1975	Yes	Yes
BA (BUSINESS EDUCATION)	1972	Yes	No
BA (SOCIOLOGY)	1972	Yes	Yes
BA (SOCIOLOGY)	1967	Yes	RA
BA BUSINESS	1973	Yes	Yes
BA DEGREE	1986	Yes	Yes
BA EDUCATION & SPECIAL ED	1989	Yes	Yes
BA EDUCATIONAL PSYCHOLOGY	1981	Yes	No
BA ELEMENTARY ED	1955	Yes	No
BA ELEMENTARY ED	1966	Yes	No
BA IN ACCOUNTING	1993	Yes	Yes
BA IN ACCOUNTING	1988	Yes	No
BA IN ART	1974	Yes	No
BA IN BUS. ADMIN.	1972	Yes	No
BA IN BUSINESS ADMIN.	1985	Yes	Yes
BA IN BUSINESS ADMN.	1988	Yes	Yes
BA IN BUSINESS MANAGEMENT	1993	Yes	Yes
BA IN ELECTRICAL	1979	Yes	No
BA IN ENGLISH	1999	Yes	No
BA IN ENGLISH, HISTORY	1970	Yes	No
BA IN MECHANICAL	1976	Yes	No
BA IN ORGANIZATIONAL MANA	1987	Yes	No
BA IN PERFORMING ARTS	1986	Yes	No
BA IN PSYCH	1960	Yes	Yes
BA IN SCIENCE	1974	Yes	Yes
BA IN SCIENCE (EDUCATION)	1957	No	No
BA IN SCIENCE-BIO	1956	No	No
BA IN TEACHING	1964	No	No
BA MUSIC,ENGLISH,SEC ED	1957	Yes	No
BA PYSC SOC	1969	Yes	No
BA SCIENCE	1963	Yes	Yes
BA SOCIAL WORK	2000	Yes	Yes
BA/APPL. SCI. & MECH ENGR	1950	Yes	No
BACH OF APPLIED PSY OF HU	2001	Yes	Yes
BACHELOR	1998	Yes	Yes
BACHELOR DEGREE IN NURSIN	1981	Yes	Yes
BACHELOR FOR BUSINESS	1951	Yes	No
BACHELOR IN ED	1985	Yes	Yes
BACHELOR OF ART	1951	Yes	No
BACHELOR OF ARTS	1990	Yes	Yes
BACHELOR OF MUSIC IN EDUC	1995	Yes	Yes
BACHELOR OF PSYCHOLOGY	1996	Yes	No
BACHELOR OF SCEINCE	2001	Yes	No
BACHELOR OF SCIENCE	1992	Yes	Yes
BACHELOR SCIENCE	1991	Yes	No
BACHELOR SCIENCE	1953	Yes	No
BACHELORS	1965	Yes	Yes
BACHELORS	1963	Yes	Yes



BACHELORS	1956	Yes	No
BACHELORS (EDUCAION)	1991	Yes	Yes
BACHELOR'S DEG. ANIMAL SC	1960	Yes	No
BACHELORS DEGR IN BUSINES	1958	Yes	No
BACHELORS DEGREE	1982	Yes	Yes
BACHELORS DEGREE	1970	Yes	No
BACHELORS IN CRIMINOLGY	1998	Yes	Yes
BACHELORS IN SCIENCE	1986	Yes	Yes
BACHELORS LANGUAGE ARTS	1953	Yes	No
BACHELORS OF SCIENCE ACCT	1980	Yes	No
BACHLOR SCIENCE IN EDUC	1982	Yes	Yes
BACHLORS IN FORESTRY	1984	Yes	Yes
BA-EDUCATION	1978	Yes	No
BAKERY MGMT CERT	1985	Yes	No
BANK LICENSE	1958	Yes	No
BANKING DEGREE	1976	Yes	No
BAOILERS LICENSE	1984	Yes	No
BA-PSYCH	1978	Yes	No
BARBER/COSMOTOLOGY	1967	Yes	No
BARTENDING LIC.	1994	Yes	No
BASIC ENTRY SPEC DEGREE	1993	Yes	Yes
BEAUTICIAN	1967	No	No
BEAUTY OPERATOR	1963	No	No
BIO SOLIDS APPLI CERTI	1992	Yes	No
BODY & PAINTING	1986	Yes	No
BOILER	1971	Yes	No
BOILER	1990	No	No
BOILER LICENSE	1996	Yes	Yes
BOILER LICENSE	1985	No	No
BOILER LICENSE	1978	No	No
BOILER OPERATOR LICENSE	1962	Yes	Yes
BOILER OPERATORS LICENSE	1985	Yes	No
BOILERS LICENSE	1976	Yes	Yes
BOILERS LICENSE	1980	No	No
BONDED	1986	No	No
BONDED		No	No
BOOKKEEPER	1984	Yes	No
BRICK LAYER	1957	Yes	No
BROADCAST CERT.	1968	No	No
BROADCAST TECHNOLOGIST	1993	Yes	No
BROKAGE LICENSE	1999	Yes	No
BS	1988	Yes	Yes
BS	1983	Yes	Yes
BS	1978	Yes	Yes
BS	1964	Yes	Yes
BS	1957	Yes	No
BS	1968	Yes	No
BS	1968	Yes	No
BS	1959		No
BS	1973	Yes	
BS (WILDLIFE MANAGEMENT)	1982	Yes	No
BS BACHELORS OF SCIENCE	1994	Yes	Yes
BS BUSINESS MANAGEMENT	2001	Yes	Yes
BS DEG MUSIC EDUCATION	1936	No	No
BS DEGREE	1972	Yes	Yes
BS DEGREE	1972	Yes	Yes
BS EDUCATION	1963	Yes	No
BS GEOGRAPHY	1967	Yes	No
BS HOME ECONOMICS	1969	Yes	No
BS IN ACCOUNTING	1974	Yes	No
BS IN EDUCATION	1986	Yes	Yes
BS IN EDUCATION	1991	Yes	No
BS IN EDUCATION	1964	Yes	No
BS IN FOREST SCIENCE	1972	Yes	Yes
BS IN NURSING	1968	Yes	Yes
BS IN PSYCHOLOGY	1992	Yes	Yes
BS IN PSYCOLOGY	1990	Yes	No
BS INDUSTRIAL TECHNOLOGY	1974	Yes	No

BS MATHEMATICS	1964	Yes	No
BS MGMT/INDUTS. RELATION	1985	Yes	Yes
BS OCCUPATIONAL HLTH/SFTY	1980	Yes	Yes
BS POLITICAL SCIENCE	1999	Yes	No
BS RN	1957	Yes	No
BS SECONDARY EDUCATION	1965	Yes	No
BS/BUSINESS DEGREE	1973	Yes	Yes
BS-CIVIL ENGINEER	1992	Yes	Yes
BUILD A BUSINESS CERTIFIC	1996	Yes	No
BUILDING	1982	Yes	No
BUS DRIVING CERT.	1991	Yes	Yes
BUS MANAGEMENT DEGREE	1999	Yes	No
BUSINESS	1986	No	No
BUSINESS DEGREE	1987	Yes	No
BUSINESS MANAGEMENT BS	1987	Yes	No
BUSINESS MGMT DEGREE	1981	Yes	No
BUSINESS SCHOOL	1954		No
CA NURSING	1990	No	No
CALDWELL BANKER CERTIFICA	2001	Yes	No
CAN'T RECALL HER LICENSE	1960	No	No
CARD GAME SURVEILLANCE LI	1991	Yes	Yes
CARPENTERHS LICENSE	1975	No	No
CARPENTRY DEGREE	1996	Yes	No
CARPENTRY LICENSE	1990	Yes	No
CATERPILLAR CERT MECHANIC	1985	No	No
CCP CERT COMPENSTATION PR	1997	Yes	No
CDL	1997	Yes	Yes
CDL	1973	Yes	Yes
CDL DRIVERS LIS. CLASS A	1999	Yes	Yes
CERIFIED WELDER	2000	Yes	No
CERT FOR COSMETOLOGY	1992	Yes	Yes
CERT FOR OFFICE MANAGMENT	1963	No	No
CERT FORKLIFT OPERATOR	1998	Yes	No
CERT FORKLIFT OPERATOR	1998	No	No
CERT HISTOLOGY TECH	1960	Yes	No
CERT PARAPLANNER	1986	No	No
CERT RED CROSS INSTRUCTOR	1999	Yes	No
CERT TO TEACH SECONDARY	1971	Yes	Yes
CERT TO WORK W/MENTALLY	1997	No	No
CERT. IN COMPUTER PROGRAM	1982	Yes	No
CERT. IN PESTICIDE APPL.	1989	Yes	Yes
CERT. IN PRINTING	1994	Yes	No
CERT. MANAGERIAL ACCT.	1985	Yes	No
CERT. PHOTO RETOUCHER	1974	Yes	No
CERT. REPAIR CIRCUIT BRDS	1999	Yes	Yes
CERT. TECHNICAL INST. MIL	1997	Yes	No
CERT. TO OPERATE A POOL	1993	Yes	Yes
CERT. WORK/W DEVL P. INDIV	1998	Yes	No
CERT. WSI	2001	Yes	Yes
CERTI APPRAISER	1998	Yes	No
CERTI HOME BASED CRISIS C	1986	Yes	No
CERTI IN METEOROLOGY	1969	Yes	No
CERTI NURSING ASSISTANT	2000	Yes	Yes
CERTI PHYS FITNESS	1985	Yes	Yes
CERTI PUBLIC HEALTH NURSE	1999	Yes	Yes
CERTIFICATE OF BASIC MACH	1993	Yes	No
CERTIFICATE OF CLERICAL	2001	Yes	Yes
CERTIFICATE OF COSMETOLOG	1985	Yes	No
CERTIFIED AEROBIC INSTRUC	1985	No	No
CERTIFIED COOK	1986	Yes	No
CERTIFIED COUNSELOR UOFI	1979	Yes	No
CERTIFIED COURT REPORTER	1991	Yes	No
CERTIFIED DENTAL ASST	1971	No	No
CERTIFIED FIREFIGHTER	1999	Yes	Yes
CERTIFIED IN OFFICE WORK	1958		No
CERTIFIED NURSE	1979	Yes	No
CERTIFIED NURSE ASST.	2001	Yes	Yes

CERTIFIED NURSING	1998	Yes	No
CERTIFIED NURSING ASSISTA	1990	No	No
CERTIFIED REG DENTAL ASST	1992	No	No
CERTIFIED SECURITY GUARD	1996	Yes	Yes
CERTIFIED TEACHER	2001	Yes	Yes
CERTIFIED WELDER		Yes	Yes
CERTIFIED WELDER	2001	Yes	Yes
CERTIFIED WELDER	1971	Yes	Yes
CERTIFIED WELDER	1977	No	No
CERTIFIED WELDING INSPECT	1992	Yes	No
CHAPLIN	1996	Yes	Yes
CHIEF ENGINEER LICENSE	1948	No	No
CHIEF ENGINEERS LICENSE	1980	Yes	Yes
CHILD DEVELOPMENT ASSOC	1996	Yes	Yes
CHILD NUTRITION	1996	Yes	Yes
CHRYSLER 1 SCHOOLING GOLD	2000	Yes	Yes
CIGARETTE CERTIFICATE	2001	Yes	Yes
CLASS A BUS MGMT MILITARY	1984	Yes	No
CLASS A DRIVERS LIC.	1991	Yes	Yes
CLASS A EDL COMM DRVR LIC	2000	Yes	Yes
CLASS A LICENSE	2000	Yes	Yes
CLASS A LICENSE FOR TRUCK	1983	Yes	Yes
CLASS A LICENSES	1995	Yes	Yes
CLASS A MASTER ELECTRICIA	1983	Yes	Yes
CLASS A MASTERS LICENSE	1991	No	No
CLASS A-TRUCK DRIVERS LIC	1959	No	No
CLASS B DRIVING LICENSE	1966	Yes	No
CLASS B LICENSE	2001	Yes	Yes
CLERICAL CERTIFICATE	1997	Yes	Yes
CMA	1993	Yes	No
CNA LICENSE	1980	No	No
CNC PROGRAMING	1985	Yes	No
COACHING CERT.	1991	Yes	Yes
COACHING CERTIFICATE	1972	Yes	Yes
COACHING CERTIFICATE	1963	Yes	No
COACHING CERTIFICATE	1964	Yes	No
COACHING CERTIFICATION	1985	Yes	Yes
COAST GUARD CAPTAIN LIC	2000	Yes	Yes
COAST GUARD LICENSE	1992	Yes	No
COLLECTION AGENCY LICENSE	1970	Yes	Yes
COLLECTION CERTIF	1999	Yes	Yes
COLLEGE DEGREE	1992	Yes	Yes
COLLEGE DEGREE	1980	Yes	No
COMM DISORDERS DEGREE	1983	Yes	Yes
COMM DRIVERS LICENSE	1996	Yes	Yes
COMM PILOT LICENSE	1994	Yes	No
COMMERCIAL DRIVER LIC	1992	No	No
COMMERCIAL DRIVERS LIC	1960	Yes	No
COMMERCIAL DRIVERS LICENS	1980	No	No
COMMERCIAL PILOT	1954	Yes	No
COMPUTER CERTIFICATE		Yes	Yes
COMPUTER CERTIFICATES	1993	Yes	Yes
COMPUTER PROGRAMING	1973	No	No
COMPUTER TECHN-DEGREE	2000	Yes	No
COMPUTER TRAINING CERTS.	1999	Yes	No
CONSTRUCTION ENGR/MANAGER		Yes	No
CONTINUING EDUCATION	2000	Yes	No
CONTRACT MANAGER CERT	1980	No	No
COOKING	1999	Yes	No
COOKS CERTIFICATE	2000	Yes	Yes
CORRECTIONAL OFFICER CERT	1987	Yes	Yes
COSMOTOLOGIST LICENSE	2000	Yes	Yes
COSMOTOLOGY	1954	No	No
COSMOTOLOGY LICENSE	1967	No	No
COUPLE MASTER DEGREES	1987	Yes	Yes
CPA	1985	Yes	No
CPA CERT PUBLIC ACCOUNTNT	1989	Yes	No
CPM CERT FROM NAPM	1996	Yes	Yes

CPO-CERT POOL OPERATOR	1998	Yes	Yes
CPP	2000	Yes	Yes
CPR	2000	Yes	Yes
CPR	1991	Yes	Yes
CPR	2000	Yes	No
CPR CERTIFICATE	1999	Yes	Yes
CPR CERTIFIED	1986	Yes	Yes
CPR CERTIFIED	2000	Yes	Yes
CPR INSTRUCTOR	1993	No	No
CRC	1986	Yes	RA
CRNA	1965	Yes	No
CUSTOM DECORATING	1989	Yes	Yes
CUSTOMER SERVICE	1994	Yes	Yes
DAYCARE LICENSE	2000	Yes	Yes
DAYCARE LICENSE	1990	No	No
DAYCARE LICENSE	1992	No	No
DDS	1945	Yes	No
DEFENSIVE DRIVING LICENSE	1991	Yes	Yes
DEGREE FROM CHEF SCHOOL	1991	Yes	Yes
DEGREE IN ART	1975	Yes	No
DEGREE IN DENTISTRY	1946	No	No
DEGREE IN DIESEL	1991	No	No
DEGREE IN ENGINEERING	2000	Yes	Yes
DEGREE IN NURSING	1981	Yes	No
DEGREE IN RETAIL MANAGEME	1991	Yes	No
DEGREE OF APPLIED SCIENCE	1989	Yes	Yes
DEGREE POWER HOUSE TECH.	1999	Yes	Yes
DEGREE-COSMOTOLOGIST	1986	No	No
DENTAL ASSISTANT	1990	No	No
DENTAL ASSISTANT DEG	1993	Yes	No
DENTAL HYGENIST	1997	Yes	Yes
DIESEL MECHANICS	1993		Yes
DISPATCHER RADIO FOR EMER	1995	Yes	Yes
DIVING LICENSE	1990	Yes	No
DOCTORATE IN PUBLIC ADMIN	1985	Yes	No
DRAFTING	1968	Yes	No
DRAFTING	1972	Yes	No
DRIVE BOBCAT + FORKLIFT	1998	Yes	Yes
DRIVING CERTIFICATE	1998	Yes	No
DUNWOODY (SHEET METAL)	1964	Yes	No
EDUCATION ADMIN	1979	Yes	No
EDUCATION LICENSE	1992	No	No
EDUCATIONAL INTERP CERT	1990	Yes	Yes
ELC MACH MAINTENANCE & RE	1970	Yes	No
ELECTRICAL JOURNEYMAN LIC	1980	No	No
ELECTRICIAN	1963	No	No
ELECTRONICS	1955	No	No
ELECTRONICS DEGREE	1992	Yes	Yes
ELECTRONICS TRADE SCHOOL	1950	Yes	No
ELEM ED LICENSE	1964	Yes	No
ELEMENTARY ED	1989	Yes	Yes
ELEMENTARY EDUCATION	1990	No	No
ELEMENTARY PRINCIPLE	1967	Yes	No
ELEMENTARY TEACHING	1964	Yes	No
EMBROIDERY CERTIFICATE	1992	Yes	Yes
EMERGENCY MED TECH LIC	1994	Yes	No
EMS CERTIFICATION	1992	Yes	Yes
EMT	1978	No	No
EMT INSTRUCTOR	1988	No	No
ENGINEERING	1998	Yes	Yes
ENGINEERING	1973	Yes	No
EPA TECHNICIAN	1994	Yes	Yes
EQUIV TO MASTERS IN EDUC	1978	Yes	No
ESL K-12	1976	Yes	No
FAMILY LIFE CERT.	1972	Yes	No
FASHION MERCHANDISE DIP.	1990	Yes	No
FEDERAL FIREARMS LICENSE	1993	No	No

FIREFIGHTER	1995	Yes	Yes
FIREFIGHTER	1980	Yes	Yes
FIRST AID		Yes	Yes
FIRST AID	2000	Yes	No
FIRST AID	1972	No	No
FIRST AID CERTIFICATE	1997	No	No
FIRST AID CERTIFIED	2000	Yes	Yes
FIRST CLASS A ENGINEER	1982	Yes	Yes
FIRST-AID & CPR	2000	Yes	No
FLIGHT TRAINING	2001	Yes	No
FOOD HANDLING LICENSE	1980	No	No
FOOD SERV MGMT DEGREE	1996	Yes	Yes
FOOD SERVER CERTIFICATION	1999	Yes	Yes
FOREST FIRE CONTROL LIC	1992	Yes	No
FOREST FIRE FIGHTING	1996	Yes	No
FOREST SERVICE/FIRE SUPPR	1980	Yes	No
FORESTRY (B/A)	1979	Yes	Yes
FORESTRY DEGREE	1977	Yes	Yes
FOSTER CARE	1960	No	No
GED	2001	Yes	No
GENERAL MOTORS	2000	Yes	Yes
GRADING CERTIFICATE	1980	Yes	No
GREATER EQUIP. OPERATING	1994		No
GRI DEGREE	1990	Yes	Yes
GROUND INSTRUCTOR RATING	1970	No	No
HAZMAT TRAINING CERT	1993	Yes	No
HEALTH INSURANCE LICENSE	1995	No	No
HEALTH UNITED COORDINATOR		No	No
HEATING,VENT,AIR-COND DEG	1974	Yes	No
HLTH UNIT COORD-CERT.	1992	Yes	No
HOME HEALTH	1980	Yes	No
HOME HEALTH CARE	1997	Yes	No
HOME HEALTH CARE LICENSE	1986	Yes	Yes
HOSPITALITY MGMT DEGREE	1988	Yes	No
HOUSE OF QUALITY CERT	1997	Yes	No
HUMAN SERVICES CERT	1990	Yes	No
HUNTING LICENSE		No	No
HYDRAULIC CONTROLS CERT	1975	Yes	Yes
HYDROLIC MECHANIC	1975	Yes	Yes
IMAGE CONSULTANT CERT.	1975	No	No
INDUSTRIAL ENGINEER	1989	Yes	No
INDUSTRIAL ENGINEERING	1960	No	No
INFO MANAGEMENT SPECIALIS	2000	Yes	No
INSURANCE AGENCY	1996	No	No
INSURANCE AGENT LIC	1974	Yes	Yes
INSURANCE AGENT LICENSE	1986	Yes	Yes
INSURANCE LICENSE	1980	Yes	Yes
INSURANCE LICENSE	1980	Yes	Yes
INSURANCE LICENSE	2000	Yes	No
INTERIOR DESIGN	1983	No	No
INTERIOR DESIGN DEGREE	1985		No
IRONWORK CERTIFICATE	1991	Yes	No
JOURNEYMAN MAINTENANCE	1985	Yes	No
JOURNEYMANS LICENSE	1996	Yes	Yes
KAR	1989	Yes	No
KEYPUNCHING	1970	No	No
LAB TECH LICENSE	1979	Yes	Yes
LABOR & IND DIV VOL CERT	2001	Yes	Yes
LAW DEGREE	1995	Yes	Yes
LAW ENFORCEMENT DEGREE	1999	Yes	Yes
LEGAL SECRETARY ASSOC DEG	1966	No	No
LENDING	1989		No
LIC IN PHYSICAL THERAPY	1996	Yes	Yes
LIC IN PRACTICAL NURSING	1981	No	No
LIC SELLING LIFE INSURANC	1992	Yes	Yes
LIC SELLING PROP INSURANC	1992	Yes	Yes
LIC. FOR INSURANCE	1988	Yes	Yes
LIC. IN PSYCHOLOGY BA		Yes	Yes

LIC. IN SOCIAL WORK M.A.	1994	Yes	Yes
LIC. REAL ESTATE	1957	No	No
LIC. SECONDARY SCH TEACH	1972	No	No
LICENSE AS RN	1980	Yes	Yes
LICENSE CHILD CARE	1980	No	No
LICENSE LANGUAGE SOCIAL	1980	Yes	Yes
LICENSE TO GUIDE IN BW	1986	Yes	Yes
LICENSE TO SELL INSURANCE	1995	No	No
LICENSE TO TEACH ELEM.	1985	Yes	No
LICENSED OFFICE ASST IN I	1994	Yes	Yes
LICENSED PRACTICAL NURSE	1972	No	No
LICENSED PRACTICAL NURSE	1950	No	No
LICENSED RN	1968	Yes	Yes
LIFE CERTIFICATE OF TEACH	1972	Yes	No
LIFE HEALTH LICENSE	1986	No	RA
LIFE SUPPRT LICENSED	1986	Yes	Yes
LIQUOR CERTIFICATE	2001	Yes	Yes
LPN	1985	Yes	Yes
LPN	1993	Yes	Yes
LPN	1966	Yes	No
LPN	1972	No	No
LPN	1983	No	No
LPN	1966	No	No
LPN	1978	No	No
LPN LICENSE	1994	Yes	Yes
LPN LICENSE	1990	Yes	Yes
M A EDUCATION	1987	Yes	No
M.A. (COMMUNICATION THEAT	1972	Yes	Yes
M.A. (FILM ARTS)	1982	Yes	No
M.B.A	1970	Yes	No
MA	1965	Yes	No
MA - FAMILY THERAPIST	1995	Yes	Yes
MA EDUCATION	1960	Yes	No
MA EDUCATION	1952	Yes	No
MA EDUCATION	1992	Yes	No
MA EDUCATION	1985	Yes	No
MA ENGINEERING	1951	Yes	Yes
MA EXPERIENTIAL EDUCATION	1994	Yes	No
MA IN BUSINESS ADMIN.	1956	Yes	No
MA IN EDUCATION	1993	Yes	Yes
MA IN EDUCATION	1952	Yes	No
MA INFORMATION MEDIA	1973	Yes	No
MA MATHEMATICS	1978	Yes	No
MACHINE LICENSE	1979	Yes	No
MACHINE OPER LICENSE	1965	No	No
MACHINIST CERT.	1973	Yes	No
MACO	1988	Yes	No
MAJOR IN MUSIC	1964	No	Yes
MANAGEMANET CLASS CERTS		Yes	Yes
MANAGEMENT	1998		No
MANAGEMENT CERTIFICATE	1997	No	No
MANAGEMENT TRADE SCHOOL	1960	Yes	No
MANUFACTURER CERT.		Yes	No
MARINE&SMALL ENGINE MECH	1979	Yes	No
MARKETING DEGREE	1983	Yes	Yes
MARRIAGE & FAMILY THERAPY	1980	Yes	No
MASSAGE THERAPY LIC.	1989	No	No
MASTER	2000	Yes	Yes
MASTER	1963	Yes	No
MASTER DEGREE - ARTS	1977	Yes	Yes
MASTER EDUCATION	1971	Yes	No
MASTER ELECTRICIAN	1985	Yes	No
MASTER OF ART	1953	Yes	No
MASTER OF ELEMENTARY EDUC	1957	Yes	No
MASTERS	1987	Yes	Yes
MASTERS	1971	Yes	Yes
MASTERS	2001	Yes	Yes

MASTERS	1965	Yes	No
MASTERS	1998	Yes	No
MASTERS	1984	Yes	No
MASTERS	1973	Yes	No
MASTERS	1961	Yes	No
MASTERS BUSINESS MGMT	1953	Yes	No
MASTERS DEG IN PUBL ADM	1991	Yes	No
MASTERS DEG IN SOCIOLOGY	1979	Yes	Yes
MASTERS DEGREE	1986	Yes	Yes
MASTERS DEGREE	1972	Yes	No
MASTERS DEGREE	1969	RA	No
MASTERS DEGREE COUSELING	1967	Yes	No
MASTERS IN DIVINITY	1969	Yes	Yes
MASTERS IN EDUATION & PUB	1975	Yes	No
MASTERS IN EDUCATION	1971	Yes	No
MASTERS IN EDUCATION	1999	Yes	No
MASTERS IN EDUCATION	1994	Yes	No
MASTERS IN ENGLISH	1985	Yes	Yes
MASTERS IN JOURNALISM	1942	Yes	Yes
MASTERS IN LANGUAGE ARTS	1962	Yes	No
MASTERS IN PSYCH	1964	Yes	Yes
MASTERS IN PSYCHOLOGY	1995	Yes	Yes
MASTER'S IN SCIENCE	1975	Yes	Yes
MASTERS MEDLA	1970	Yes	No
MASTERS OF FINE ARTS	1972	Yes	No
MASTERS TEACHING SEC/ELEM	1963	Yes	No
MASTERS-FAMILY COUNCELING	1998	Yes	No
MBA	1981	Yes	RA
MBA	1982	Yes	No
MECHANICAL MAIL RIGHTS	1975	Yes	Yes
MECHANICS	1969	Yes	No
MED. GENERAL COUNSELING	1981	Yes	Yes
MEDICAL AIDE	1998	Yes	Yes
MEDICAL ASSISTANT CERT	2000	Yes	No
MEDICAL CODING CERT	2000	Yes	Yes
MEDICAL DOCTOR	1987	Yes	Yes
MEDICAL DOCTOR DEGREE	1946	No	No
MEDICAL SECRETARY	1997	Yes	Yes
MERCHANDISE CERT	1960	Yes	No
MERCHANDISING	1968	Yes	No
MERCHANT MARINER LICENSE	1959	No	No
METEOROLOGICAL TECHNICIAN	1996	Yes	Yes
MICHIGAN TEACHING LICENSE	1985	Yes	No
MICROSOFT ACCESS	2001	Yes	Yes
MICROSOFT CERT	1995	Yes	No
MICROSOFT EXCEL/QUICK	1996	Yes	Yes
MICROSOFT OFFICE CERT.	1997	Yes	Yes
MICROSOFT WORD	1994	Yes	Yes
MILL RIGHT BUSINESS	1986	No	No
MILLWRIGHT	2000	Yes	No
MLT CERTIFICATION	1989	Yes	Yes
MN LICENSE PRACTICAL NURS	1992	Yes	Yes
MN PEACE OFFICER LICENSE	2000	Yes	Yes
MN TEACHER LICENSE	1982	No	No
MN TEACHING LICENSE	1972	Yes	Yes
MN TEACHING LICENSE	2000	Yes	No
MS IN CPRC	1989	Yes	Yes
MS IN FOREST RESOURCES	1980	Yes	Yes
MUSIC EDUCATION DEGREE	1982	No	No
NAD-LEVEL THREE INTERP	1995	Yes	Yes
NATIONAL SKI PATROL	1972	No	No
NEPA 901	2000	Yes	Yes
NON-COMM. PESTICIDE OPER.	2000	Yes	Yes
NOTARY LIC./CERT.	2000	Yes	Yes
NOTARY PUBLIC	1985	No	No
NOTARY PUBLIC LICENSE	1970	Yes	Yes
NURSES AID	1983	No	Yes
NURSES ASSISTANT CERT.	1980		No

NURSES LICENSE	1993	Yes	Yes
NURSING	1990	Yes	No
NURSING	1981	No	No
NURSING AIDE CERTIFICATIO	1987	No	No
NURSING AIDE/ASSISTANT	1970	No	RA
NURSING ASSIST CERT	2000	Yes	No
NURSING ASSISTANT	1986	Yes	Yes
NURSING ASSISTANT	1998	Yes	Yes
NURSING ASSISTANT CERT.	2001	Yes	No
NURSING ASS'T DEGREE	1985	Yes	Yes
NURSING CERTIFICATE	1976	No	No
NURSING DEGREE	1982	Yes	Yes
NURSING DEGREE	1997	Yes	No
NURSING DEGREE	1958	No	No
NURSING DEGREE	1945	No	No
NURSING LICENSE	1967	Yes	Yes
NURSING LICENSE	1954	Yes	No
OCCUPATION SAFETY & HEALT	1978	No	No
OCCUPATIONAL HEALTH NURSE	1995	Yes	Yes
OCCUPATIONAL THERP IN MN	1964	Yes	Yes
OFFICE AUTOMATION	1999	Yes	No
OFFICE MANAGER	1982	Yes	No
OPERATOR FORK LIFT	2001	Yes	No
ORDINATION CERTIFICATE	1979	Yes	Yes
PARAMEDIC	1991	No	No
PEACE OFFICER LIC	1993	Yes	Yes
PEACE OFFICER LICENSE	1998	Yes	Yes
PEACE OFFICERS LICENSE	1986	Yes	Yes
PHARMACY	1994	No	No
PHARMACY LICENSE	1999	Yes	Yes
PHARMACY TECH CERT.	1999	Yes	Yes
PHD	1966	Yes	Yes
PHD	1974	Yes	Yes
PHD (ADMINISTRATION)	1984	Yes	RA
PHD BUSINESS ADMIN	1980	Yes	No
PHR PROF IN HUMAN RESOURC	1998	Yes	Yes
PILOT LIC.	1944	No	No
PILOT LICENSE	2001	Yes	No
PILOT LICENSE	1983	Yes	No
PILOTS LICENSE	1971	Yes	No
PILOTS LICENSE	1971	Yes	No
POLARIS & ARCO ENG REPAIR	1998	Yes	No
POST LICENSES	2000	Yes	Yes
POST SECONDARY EDUCATION	1979	No	No
POWER MANAGEMENT	1975	Yes	Yes
PRIMARY EDUCATION DEGREE	1945	No	No
PRINCIPLES LICENSE	1994	Yes	Yes
PRIVATE PILOT CERTIFICATE	1968	Yes	No
PROFESSIONAL MIDWIFE	1998	Yes	Yes
PROGRAMMING DEGREE	2000	Yes	No
PSYCH DEGREE	1958	Yes	Yes
PSYCHOLOGY (4 YRS)	1972	No	No
PSYCHOLOGY LICENSE	1980	No	No
RADIATION THERAPIST LIC.	1995	Yes	Yes
RADIO DISPATCHER CERT		No	No
RADIO OPERATOR	1975	No	No
RADIO/TV REPAIR	1956	No	No
RADIOLOGIC TECH LIC.	1994	Yes	No
REAL ESTATE	1997	Yes	No
REAL ESTATE	1991	Yes	No
REAL ESTATE	1965	No	No
REAL ESTATE BROKER	1987	Yes	Yes
REAL ESTATE BROKERS LIC	1975	Yes	Yes
REAL ESTATE LIC	1999	Yes	No
REAL ESTATE LICENSE	1996	Yes	Yes
REAL ESTATE LICENSE	1990	No	RA
REAL ESTATE LICENSE	1958	Yes	No



REAL ESTATE LICENSE	1983	Yes	No
REAL ESTATE LICENSE	2000	Yes	No
REAL ESTATE LICENSE	1985	No	No
REAL ESTATE LICENSE	1965	No	No
RECEPT/SECRETARY DEGREE	1972	Yes	Yes
RECREATION DEGREE	1972	Yes	Yes
RECREATIONAL THERAPY	1997	Yes	No
REG. DENTAL ASSISTANT	1985	No	No
REGISTER PROFESSIONAL	1996	Yes	Yes
REGISTERED DENTAL ASSIST	1980	Yes	Yes
REGISTERED HEALTH CARE	1999	Yes	Yes
REGISTERED NURSE	1995	Yes	Yes
REGISTERED NURSE	1967	Yes	No
REGISTERED NURSE	1979	No	No
REGISTERED NURSE LICENSE	1989	Yes	Yes
REGISTERED NURSE LICENSE	1996	Yes	Yes
REGISTERED NURSE LICENSE	1958	No	No
REMANUFACTURING CERT	1999	Yes	Yes
RETIRED POLICEMAN	1962	No	No
RIGGING CERTIFICATE	1991	Yes	No
RN	1997	Yes	Yes
RN	1999	Yes	Yes
RN	1948	No	No
RN (REGISTERED NURSE)	1946	No	No
RN DEGREE	1955	Yes	No
RN DEGREE	1990	Yes	No
RN DEGREE	1971	Yes	No
RN LICENSES	1986	Yes	Yes
ROBOTICS	1998		No
SAFETY CERT.(FOR FLIGHT)	1972	No	No
SAFETY CERTIFICATE	2001	Yes	Yes
SAFETY TRAINING CERTIFICA	1998	Yes	No
SAFETY/HEALTH TRAINING	1990	Yes	No
SALES CERTIFICATE	2001	Yes	No
SANITATION/SAFETY CERTI	1999	Yes	Yes
SCHOOL BUS DRIVER LICENSE	1967	No	No
SCHOOL BUS DRIVERS LICENS	1966	No	No
SEAMAN'S CARD	2000	Yes	No
SECRETARIAL	1951	Yes	No
SECRETARIAL ACCOUNT CERT	1996	Yes	No
SECRETARIAL CERT	1992	Yes	No
SECRETARIAL CERT	1992	Yes	No
SECRETARIAL CERT.	1986	Yes	Yes
SECRETARIAL CERTIFICATE	1988	Yes	No
SECRETARY CERTIFICATE	1983	Yes	No
SECURITY LICENSE	1992	Yes	No
SECURITY REG MGR @AIRPORT	1973	No	No
SERIES 64	1994	Yes	Yes
SERIES 7	1994	Yes	Yes
SERIES F	1999	Yes	Yes
SHEET METAL (ON JOB TRNG)	1963	Yes	No
SHEET METAL CERTIFICATES	1973	Yes	RA
SHEET METAL LICENSE	1967	Yes	Yes
SIGN LANGUAGE	1998	Yes	Yes
SMALL BUSINESS CERT		Yes	No
SOCIAL WORK DEGREE	1968	Yes	Yes
SOCIAL WORK LICENSE	1990	Yes	No
SOCIAL WORKER BA	1978	Yes	Yes
SOCIAL WORKER LICENSE	2000	Yes	Yes
SPEECH THERAPY & AUDIOLOG	1965	Yes	No
STATE CERT. MILLWRIGHT	2001	Yes	No
STATE OF MN CERT.IN PURCH	1993	Yes	Yes
STATIONARY ENGINEER LIC	1978	Yes	Yes
SUPERINTENDANT	1975	Yes	No
SUPERINTENDANT LICENSE	1994	Yes	No
TAX PREPARING	1996	Yes	No
TEACHER CERTIFICATE	1952	Yes	No
TEACHER EDUC/ELEM	1990	Yes	No

TEACHER LICENSE	1978	No	No
TEACHERS CERT	1970	No	RA
TEACHERS LICENSE	1991	Yes	Yes
TEACHERS LICENSE	1959		No
TEACHING	1976	Yes	Yes
TEACHING	1969	Yes	Yes
TEACHING	1968	No	No
TEACHING CERTIFICATE	1972	Yes	Yes
TEACHING CERTIFICATE	1963	Yes	No
TEACHING CERTIFICATE	1945	Yes	No
TEACHING CERTIFICATE	1959	Yes	No
TEACHING DEGREE	1967	Yes	Yes
TEACHING DEGREE	1951	Yes	No
TEACHING DEGREE	1952	Yes	No
TEACHING DEGREE	1990	No	No
TEACHING DEGREE IOWA	1959	No	No
TEACHING DEGREE OHIO	1980	No	No
TEACHING LICENSE	1991	Yes	Yes
TEACHING LICENSE	1995	Yes	Yes
TEACHING LICENSE	1994	Yes	Yes
TEACHING LICENSE	1998	Yes	Yes
TEACHING LICENSE	1978	Yes	Yes
TEACHING LICENSE	1979	Yes	Yes
TEACHING LICENSE	1996	Yes	Yes
TEACHING LICENSE	1976	Yes	Yes
TEACHING LICENSE	1953	Yes	No
TEACHING LICENSE	1976	Yes	No
TEACHING LICENSE	1932	Yes	No
TEACHING LICENSE	1962	Yes	No
TEACHING LICENSE	1991	Yes	No
TEACHING LICENSE	1994	No	No
TEACHING/BACHELOR OF EDUC	1962	Yes	No
TELECOMMUNICATIONS	1998	No	No
TELEPHONE SYSTEM	1994	Yes	Yes
TELETHONY CERTIFICATE	1975	Yes	Yes
THEOLOGY DEGREE	1955	Yes	No
THERAPUTIC MASSAGE THERAP	1974	No	No
THERAPUTIC RECREATION	1987	Yes	Yes
TMA(TRAINED MEDICAL ASST)	2001	Yes	Yes
TOASTMASTER	1998	No	Yes
TOTAL QUALITY CERTIFICATE	1996	Yes	No
TOYOTA	2000	Yes	Yes
TRUCK DRIVER'S LICENSE	1958	No	No
UNDERGROUND SUPV FOR TANK	1992	Yes	Yes
UNION CARPENTER	1973	Yes	Yes
UPPER AIR TECHNICIAN	1996	Yes	Yes
VARIOUS IN-SERVICE CERT.	1997	Yes	No
VARIOUS MILITARY DEGREES	1990	Yes	No
VIBRATION INSTITUTE CERT	2000	Yes	Yes
VOC. CERT. ADMIN. SUPPORT	1989	Yes	No
VOCATIONAL ACCOUNTING	1974	Yes	No
VOCATIONAL CERT. FOR TCH	1970	Yes	No
WASTE WATER OPERATOR CERT	1992	Yes	Yes
WASTEWATER TREATMENT	1980	Yes	Yes
WATER SAFETY INSTR LIC	1986	No	No
WATER TREATMENT CERTI	1992	Yes	No
WATER/SEWER LICENSE	1973	Yes	Yes
WELDING	1980	Yes	No
WELDING CERTIFICATE	1989	Yes	Yes
WELDING CERTIFICATE	1978	Yes	Yes
WELDING CERTIFICATE	1970	Yes	No
WELDING CERTIFICATE	1989	Yes	No
WELDING CERTIFICATE	1981	No	No
WELDING CERTIFICATE	1983	No	No
WETLAND TECH CERTIFICATE	1995	Yes	Yes
WI TEACHING LICENSE	1990	Yes	No
WOODLAND FIREFIGHTING	1999	Yes	Yes

WORKING W/EXPLOSIVES	1998	No	No
WORK-RELATED CERT	1988		Yes
X-RAY TECHNICIAN	1972	No	No
ZY TECHNICAL SCHOOL DEG.	1971	Yes	No

## Appendix C: List of Licenses, Certificates and Degrees Held by Respondents (continued)

### PORT CITIES REGION:

<u>Certificate, License or Degree Held</u> <u>Certificate</u>	<u>Year Received</u>	<u>Now Valid?</u>	<u>Work in Job Requiring this</u>
2 YEAR DEGREE	1995	Yes	
2ND MASTERS	1972	Yes	No
4 YR BUSINESS & COMM	1985	Yes	No
A/C CERT		Yes	Yes
AA APRASING	1981	Yes	No
AA IS BIOLOGY	1987	Yes	No
AA MEDICAL ADMIN	1991	Yes	Yes
AA-ACCOUNTING	1977		No
AA-BUSINESS	1945	Yes	No
AA-EDUCATION	1972	Yes	No
AAS	1981	Yes	Yes
AAS	2001	Yes	No
AAS & HEALTH CLAIMS SPEC	1998	Yes	No
AAS DEGREE ADMIN SEC'T	1995	Yes	No
AC SPECIALIST (CERT.)	1995	Yes	Yes
ACCOUNTING	1990	Yes	No
ACCOUNTING DEGREE	1991	Yes	Yes
ACCOUNTING DEGREE	1968	Yes	No
ACCOUNTING DEGREE	1968	Yes	No
ACCOUNTING DEGREE	1972	Yes	No
ACCTS RECEIVABLE COLL SPE	1995	Yes	Yes
ADMIN OF SPECIAL EDUCATIO	1975	Yes	No
ADMIN. ASSOC. DEGREE	1986	Yes	No
ADV CRITICAL CARE NURSE	2000	Yes	No
AFE CERTIFICATION	1998	Yes	No
AIRPLANE LICENSE	1987	Yes	Yes
AM SOCIETY TRAINING DEG	1995	Yes	No
AM. RADIOLOGICAL CERT	2000	Yes	Yes
APPICATORS LICENSE	2000	Yes	Yes
APPRAISERS LICENSE	1996	Yes	Yes
APPRENTICESHIP	2000	Yes	Yes
APPRENTICESHIP CLERICAL	1992	Yes	Yes
ASE CERTIFICATE	1990	Yes	No
ASSOC DEGREE IN ACCNTNG	1996	Yes	Yes
ASSOC DEGREE IN MARKETING	1978	Yes	Yes
ASSOC DEGREE IN NURSING	1985	Yes	Yes
ASSOC IN NURSING	1970	Yes	No
ASSOCIATE DEGREE	1988	Yes	No
ASSOCIATE DEGREE	1983	No	No
ASSOCIATE DEGREE NURSING	1982	Yes	Yes
ASSOCIATE DEGREE TEACHER	1992	No	No
ASSOCIATE OF ARTS	1999	No	No
ASSOCIATE OF ARTS DEGREE	1981	Yes	No
ASSOCIATES DEGREE	1986	Yes	Yes
ASSOCIATES DEGREE PHYSICS	1991	Yes	Yes
AT CERTIFIED	2000	Yes	No
AUTO BODY TECH	1984	Yes	Yes
B.A IN COUNSELING	1979	Yes	Yes

B.A IN ECONOMICS	1995	Yes	Yes
B.A.	1976	Yes	Yes
B.A. SOCIOLOGY	1996	Yes	No
B.S.	1980	Yes	Yes
B.S.	1971	Yes	No
B.S. DEGREE	1997	Yes	Yes
B.S. IN ELEMENTARY ED	1965	No	No
B.S. NUTRITION	1992	Yes	Yes
B.SC & MANAGEMENT	1989	Yes	Yes
BA	1975	Yes	Yes
BA	1992	Yes	Yes
BA	1997	Yes	Yes
BA	1970	Yes	Yes
BA	1991	Yes	No
BA	1966	Yes	No
BA	1953	Yes	No
BA	1938	Yes	No
BA (BIOLOGY)	2000	Yes	Yes
BA (PHARMACY)	1990	Yes	Yes
BA BIOLOGY	1979	Yes	Yes
BA ECONOMICS	1987	Yes	Yes
BA ELECTRICAL ENGINEERING	1966	Yes	No
BA ELEMENTARY EDUCATION	1973	Yes	Yes
BA IN ACCOUNTING	1986	Yes	Yes
BA IN ARTS	1979	Yes	Yes
BA IN BUS ADMIN	1963	Yes	No
BA IN COMMUNICATIONS	1996	Yes	Yes
BA IN COMMUNICATIONS	1988	Yes	Yes
BA IN ECONIMICS	1971	Yes	Yes
BA IN ECONOMICS	1966	Yes	Yes
BA IN EDUCATION	1971	Yes	Yes
BA IN MANAGEMENT	1992	Yes	No
BA IN SCIENCE	1994	Yes	No
BA IN TEACHING	1999	Yes	Yes
BA IN TEACHING	1977	Yes	Yes
BA INFORMATION	1992	Yes	Yes
BA INTERDISCIPLINARY STUD	1997	Yes	No
BA JOURNALISM	1975	Yes	Yes
BA LAW ENFORCEMENT	1976	Yes	No
BA OF APPLIED SCIENCE DEG	1985	Yes	Yes
BA PHYSICAL THERAPY	1986	Yes	Yes
BACH OF PLITICAL SCIENCE/	1986	Yes	Yes
BACHELOR DEG CRIMINOLOGY	1957	No	No
BACHELOR IN HIST/RELIGION	1980	Yes	Yes
BACHELOR OF PHILOSOPHY	1967	Yes	No
BACHELOR OF SCIENCE ENGR	1981	Yes	Yes
BACHELORS	1982	Yes	Yes
BACHELORS	1940		No
BACHELORS DEGREE	1968	Yes	No
BACHELORS FINE ARTS	1968	Yes	Yes
BACHELORS IN BIOLOGY	1994	Yes	Yes
BACHELORS IN COMMUNICAT	1992	Yes	No
BACHELORS IN HEALTH ARTS	1984	Yes	No
BACHELORS OF ARTS & SCIEN	1998	Yes	Yes
BACHELORS OF SCIENCE	1936	Yes	Yes
BACHELORS/RN	1990	Yes	Yes
BACHELORS-MUSIC EDUCATION	1994	Yes	No
BACHLOR DEGREE	1948	Yes	No
BA-CRIMINOLOGY, SOCIOLOGY	1999	Yes	No
BAR LICENSE	1992	Yes	Yes
BARTENDERS	1999	Yes	Yes
BASIC EMT	1992	Yes	Yes
BASIC EMT	2000	Yes	No
BASIC ENGLISH	1990	No	No
BASIC FIRE FIGHTING	1992	Yes	Yes
BA-TEACHING CERT	1990	Yes	Yes
BEAUTICIAN	1986	No	No

BLUEPRINT/DRAFTING	1981	No	No
BOARD CERTIFICATION	1995	Yes	Yes
BOILER OPERATORS LIC.	1999	No	No
BOILERS LICENSE		Yes	Yes
BOILER'S LICENSE	1998	Yes	Yes
BROADCASTING DIPLOMA	1995	Yes	Yes
BS	1972	Yes	Yes
BS	1999	Yes	Yes
BS	1980	Yes	Yes
BS	1965	Yes	No
BS (BACHELOR OF SCIENCE)	1985	Yes	No
BS DEGREE	1964	Yes	No
BS DEGREE IN ELEM EDUC	2001	Yes	No
BS ELECTRICAL ENGINEERING	1997	Yes	Yes
BS ENGINEERING	1970	Yes	Yes
BS IN ACCOUNTING	1981	Yes	Yes
BS IN BUSINESS	1970	Yes	Yes
BS IN EDUCATION	1971	Yes	No
BS IN ELEMENTARY ED	1963	Yes	No
BS IN NURSING	1961	Yes	Yes
BS IN PHYSICAL EDUCATION	1964	Yes	No
BS IN PHYSICAL EDUCATION	1990	Yes	No
BS MORTUARY SCIENCE	1995	Yes	Yes
BS SPEECH PATHOLOGY	1960	Yes	No
BS TEACHING	1968	Yes	Yes
BS-BUS. ADMIN & MARKETING	1996	Yes	No
BSE	1971	Yes	Yes
BS-EDUCATION	1968	Yes	Yes
BS-FORESTRY	1974	Yes	No
BS-SOCIAL WORK	1993	Yes	Yes
BUS DRIVER LICENSE	1997	Yes	No
BUSINESS ADMINISTRATION	1992	Yes	Yes
BUSINESS MANAGEMENT MRA	1982	Yes	No
CDL-COMMERCIAL DRIVERS LI	1990	Yes	No
CERT ARMY RECRUITING	1997	Yes	No
CERT CHILD CARE PROVIDER	2001	Yes	Yes
CERT GENERAL HEALTH MGMT	2000	Yes	Yes
CERT GROUP FACILITATION	1994	Yes	Yes
CERT MAINT NATION APT.ASC	1995	Yes	No
CERT MASSAGE THERAPIST	1987	Yes	Yes
CERT NURSING ASSISTANT	1980	Yes	Yes
CERT OF ACHIEVEMENT CANVA	1991	Yes	Yes
CERT. IN REPAIR EQUIP	1999	Yes	Yes
CERT. IN SIGN LANGUAGE	1995	Yes	Yes
CERT. IN WISC (SOCIAL WRK	1998	Yes	No
CERT. OCCUPATIONAL THERAP	2000	Yes	Yes
CERT. PROFESSIONAL DEGREE	1972	Yes	No
CERT. RISK MGMT ASSOCIATI	1988	Yes	No
CERT. TEACHERS AID	1971	Yes	No
CERT. TEACHING ELEM ONLY	1957	No	No
CERTI BONDSMEN	1999	Yes	No
CERTI FROM MILITARY SCHL	1993	No	No
CERTI GENL OFFICE RECEIPT	1975	Yes	No
CERTI NURSE HOME HEALTH	1984	Yes	Yes
CERTI POOL OPERATOR	2001	Yes	Yes
CERTI PUBLIC ACCOUNTANT	1984	Yes	Yes
CERTIF FROM VO-TECH CLRCL	1976	Yes	Yes
CERTIFICATE MICROSTETION	1996	Yes	Yes
CERTIFICATE NICEC ENG	1996	Yes	Yes
CERTIFIED CONTRACT MNGR	1996	Yes	Yes
CERTIFIED CPR	1989	Yes	Yes
CERTIFIED DRUG COUNSELOR	1978	No	No
CERTIFIED FIRST AID	1989	Yes	Yes
CERTIFIED FOR LAW ENFORC	2000	Yes	No
CERTIFIED IN FUEL SYSTEM	1980	No	No
CERTIFIED IN MECHANIC SYS	1980	No	No
CERTIFIED LAW ENFORCER	1994	Yes	Yes
CERTIFIED NURSES ASSIST	1991	No	No

CERTIFIED REHAB COUNSLOR	1991	Yes	Yes
CERTIFIED WATEPROOFER	1995	Yes	Yes
CFC REFRIGERATOR CERT	1993	No	No
CHARM	1971		No
CHILD CARE	1970	No	No
CHILD PASSENGER SAFETY TE	2000	Yes	Yes
CHILDCARE LICENSE	1981	Yes	No
CITY LICENSE FOR MESSAGE	2000	Yes	Yes
CMA CERTIFIED MED ASSIST	1999	Yes	Yes
CNA			No
CNA LICENSE	1998	Yes	Yes
COACHING	2000	Yes	Yes
COACHING CERT	1998	Yes	Yes
COMMERCIAL BRKERS LICENSE	1990	Yes	No
COMMERCIAL DRIVERS LICENS	1996	Yes	Yes
COMMERCIAL DRIVING	1991	Yes	Yes
COMMERCIAL OUTSIDE SALES	1999	Yes	Yes
COMMUNITY ORGANIZING	1999	Yes	No
COMPUTER INFO TECHHOLOGIS	2000	Yes	Yes
COMPUTER PROG CERT	1990	Yes	No
COMPUTER PROGRAMMING	1989	Yes	No
CONDUCTOR	1998	Yes	Yes
CONTRACTORS LICENSE	1986	Yes	Yes
CORRECTION OFFICER	1991	Yes	Yes
CORRESPONDENCE	1991	No	Yes
COSMETOLOGY	1984	No	No
COSMOTOLOGY LICENSE	1985	Yes	Yes
COSMOTOLOTY DEGREE	1994	Yes	Yes
CPA	1989	Yes	Yes
CPR	2000	Yes	Yes
CPR	2000	Yes	Yes
CPR	1997	Yes	No
CPR & 1ST AID CERTIFIED	2001	Yes	Yes
CPR & FIRST AID	1997	No	No
CPR INSTRUCTOR CERTIFIED	2000	Yes	Yes
CRASH RESCUE OFFICER CR	1951	No	No
CUSTOMS INSPECTOR	1998	Yes	No
DEALINGW/OTHER PEOPLE	1995	Yes	No
DEGREE IN ELECTRICAL	1969	No	No
DIESEL ENGING REPAIR CERT	1991	Yes	No
DIESEL MECHANIC LIC.	1986		No
DIETARY MANAGER	1984	Yes	No
DIPLOMA NURSE/NURSING	1969	Yes	Yes
DISK JOCKEY LICENSE	1991	Yes	No
DOCTORATE	1992	Yes	Yes
DOCTORATE OF PHILOSOPHY	1998	Yes	Yes
ELECTRICIAN	1949	No	No
ELECTRICIAN LICENSE	2000	Yes	Yes
ELECTRONICS CERTIFICATE	1982	Yes	No
EMT CERT	1987	Yes	No
ENGING CERT		Yes	Yes
EPA CERTIFICATION	1998	Yes	No
ESL TEACHING LICENSE	1998	Yes	No
FCC LICENCE	1996	Yes	Yes
FCC LICENSE	1993	Yes	Yes
FED CERT SELLING INSUR	1998	Yes	No
FEDERALLY CERT CARPENTER	1992	Yes	No
FIBER OPTIC TECH.	2000	Yes	Yes
FINANCIAL PLANNING PROGRA	1998	Yes	No
FIREFIGHTING CERT	1981	Yes	No
FIRST AID INSTR CERTIFIED	2001	Yes	Yes
FLORAL DESIGN CERTIFICATE	1982	No	No
FLORIDA REAL ESTATE LIC	1989	No	No
FOOD HANDLING CERT	2000	Yes	No
FOOD SANITATION CERT	2000	Yes	No
FORK LIFT LICENSE	1999	Yes	No
FORK LIFT OPERATOR	2000	Yes	Yes

FORKLIFT	2000	Yes	Yes
GAS FILTERS LICENSE	1984	Yes	Yes
GED	1970	Yes	No
HAIR DRESSING	1984	Yes	No
HAZARDOUS MATERIAL CERT	1998	No	No
HAZARDOUS MATERIALS OPER	1984	Yes	Yes
HAZARDOUS MATLS CERTI	1991	Yes	Yes
HAZARDOUS WASTE OPERATOR	1996	Yes	Yes
HAZMAT TRAINING	2000	Yes	No
HEALTH + WELLNESS		No	No
HEALTH COORDINATOR	1999	Yes	Yes
HEALTH REALIZATION	2000	Yes	No
HEALTH UNIT COORDINATOR	1998	Yes	Yes
HEALTH UNIT COORDINATOR	1984	Yes	No
HEAVY EQUIPMENT OPERATOR	1972	Yes	No
HOME HEALTH AID CERT	1969	No	No
HVAC CERTIFIED	1995	Yes	No
HYGENE LICENSE	1988	Yes	Yes
ICAR WELDING CERT.	2000	Yes	Yes
INCOME TAX PREP CERT.	1993	Yes	No
INSTALLATION TECHNICIAN	2000	Yes	Yes
INSURANCE LICENCE	1986	Yes	No
INSURANCE LICENSE	1987	Yes	Yes
INSURANCE LICENSE	1997	No	No
INTERIOR DESIGN MGMT CERT	1977	Yes	No
INTERNATIONAL STUDIES	2000	Yes	No
IRON WORKER	1957	Yes	No
JOURNEYMAN	1998	Yes	Yes
JOURNEYMAN CARPENTER	1977	Yes	Yes
JOURNEYMAN PAINTER CERT	1972	Yes	No
JR COLLEGE BUS ADMIN DEG	1985	Yes	Yes
JURORS DOCTORATE	1974	Yes	Yes
LAB TECH CERT	1981	Yes	Yes
LAW DEGREE (JD)	1994	Yes	Yes
LEADERSHIP CERT	1995		No
LIC BY STATE DEPT OF EDUC	1970	No	No
LIC MN BD OF SOCIAL WORK	1990	No	No
LIC TO PRACTICE LAND SURV	1982	Yes	Yes
LIC. MN TO SELL LIFE INS	1995	No	No
LICENCED COSMATOLOGIST	1986	Yes	No
LICENSE FOR DENTAL HYGENE	1973	Yes	Yes
LICENSE IN PRACTICAL NURS	1995	Yes	Yes
LICENSE NURSE	1993	Yes	Yes
LICENSE PRACTICAL NURSE	1960	No	No
LICENSE TO TEACHING	1972	Yes	Yes
LICENSED ASSESSOR	1997	Yes	Yes
LICENSED FUMIGATOR	1979	Yes	No
LICENSED NURSE	1999	Yes	Yes
LICENSED NUTRITIONIST	1996	Yes	No
LICENSED PESTICIDE OPER.	1999	Yes	No
LICENSED SAMPLES	2001	Yes	Yes
LICENSED SOCIAL WORKER	1999	Yes	Yes
LIFE & HEALTH CERT.	1979	Yes	No
LIFE TEACHING LIC	1960	Yes	No
LPN	1974	No	No
LPN LICENSE PRACTICAL NUR	1966	No	No
LSW-IN MN (SOCIAL WORK)	1998	Yes	Yes
M.D.	1983	Yes	Yes
MA	1999	Yes	Yes
MA	1996	Yes	Yes
MA	1971	Yes	No
MA DIVINITY	1991	Yes	Yes
MA IN MINISTRY	1968	Yes	Yes
MA LAW ENFORCEMENT	1982	Yes	No
MA PUBLIC ADMINISTRATION	1985	Yes	No
MA SPECIAL ED	1968	Yes	No
MA-INSTITUTION OF AD	1983	Yes	
MAINTENANCE MECHANIC	1982	Yes	Yes

MAJOR IN POLITICAL SCI.	1988	Yes	Yes
MANAGING	1973	Yes	Yes
MANAGING MAC TRUCK	1995	Yes	No
MARKETING OF MANAGERS	1979		No
MASSAGE THERAPY	1981	Yes	No
MASTE IN DEVINITY DEGREE	1984	Yes	Yes
MASTER AUTO TECH. (CERT.)	1996	Yes	Yes
MASTER OF EDUCATION	1970	Yes	Yes
MASTER OF SCEINCE	1983	Yes	Yes
MASTERS	1966	Yes	No
MASTERS	1957		No
MASTERS +45	1963	Yes	No
MASTERS BUS. ADM	1976	Yes	Yes
MASTERS CARPENTRY	1997	Yes	Yes
MASTERS COMMERCE	1947	Yes	No
MASTERS DEG ADULT EDUC	1965	Yes	No
MASTERS DEG IN EDUCATION	1978	Yes	No
MASTERS DEG IN UNION WORK	1995	Yes	Yes
MASTERS DEG SOCIAL WORK	1959	Yes	No
MASTERS DEGREE	1991	Yes	Yes
MASTERS DEGREE	1952	Yes	No
MASTERS EDUCATION	1975	Yes	No
MASTERS EDUCATION	1972	Yes	No
MASTERS FINE ARTS	1972	Yes	Yes
MASTERS IN ARTS	1972	Yes	Yes
MASTERS IN COMMUNICATIONS	1996	Yes	No
MASTERS IN EDUCATION	1999	Yes	No
MASTERS IN EDUCATION	1989	Yes	No
MASTERS IN SOCIAL WORK	1999	Yes	Yes
MASTERS OF SCIENCE&ED ADM	1969	Yes	No
MASTERS WRITING	1978	Yes	No
MASTERS/NURSE PRACTIIONER	1997	Yes	Yes
MBA	1984	Yes	Yes
MECH ENG BA	1982	Yes	No
MECHANIC DIPLOMA(4YR APR)	1978	Yes	No
MECHANICAL DESIGNER DEG	1994	Yes	Yes
MEDICAL ASSISTANT	2000	Yes	No
MEDICAL LAB TECHNICIAN	1975	No	No
MERCHANDIZING DEGREE	1974	Yes	No
MICROSOFT COMPUTER ENGR	1998	Yes	Yes
MICROSOFT GREAT PLAINS	1990	Yes	Yes
MICROSOFT OFFICE	2000	Yes	No
MINOR IN MATH/PHSICS	1980	Yes	Yes
MN INSURANCE LICENSE	2000	Yes	No
MN INSURANCE LICENSE	1995	No	No
MN LAW LICENSE	1981	Yes	Yes
MN LAW PRATICE LICENSE	1994	Yes	Yes
MORTGAGE BROKER LICENSE	1997	No	No
MS	1999	Yes	No
MS IN EDUCATION	1982	Yes	No
MS SPECIAL EDUCATION		Yes	No
NAT CABLE TV INST INSTALL	2000	Yes	Yes
NATL BROADCASTORS CERT	1997	Yes	Yes
NATL CERT-MESSAGE	2000	Yes	No
NOTARY PUBLIC	1999	Yes	No
NRUSING ASSIST INSTR CERT	2001	Yes	Yes
NURSING ASSISTANT	1994	Yes	Yes
NURSING ASSISTANT	1999	Yes	Yes
NURSING ASSISTANT	1998		Yes
NURSING ASSISTANT		Yes	No
NURSING ASSISTANT CERT.	2001	Yes	No
NURSING ASST. CERT.	1998	No	No
NURSING CERT FOR MN	1998	Yes	Yes
NURSING DEGREE	1971	Yes	No
NURSING HOME ADMIN.	1991	Yes	
OCCUPATIONAL THERAPY	1998	No	No
ORIENTAL EDUCATION	1957	No	No



OUTBOARD MECHANIC LIC.	1983		No
PARALEGAL	1987	Yes	Yes
PARALEGAL	1985	Yes	No
PARAMEDIC LICENSE	1988	Yes	No
PHARMACUETICAL REP.	1992	Yes	Yes
PHARMACY LICENSE	1991	Yes	Yes
PHD ECONOMICS	1955	Yes	No
PHD IN COMMUNICATIONS	1997	Yes	No
PHD IN FINE ARTS	1981	Yes	Yes
PHYSICAL EDUCATION	1957	No	No
PILOTS LICENSE	2001	Yes	No
PMC	1978	Yes	No
PRESBYTERIAN MINISTER	1978	Yes	Yes
RAILROAD LICENSE	1973	Yes	Yes
REAL ESTATE	1957	Yes	No
REAL ESTATE BROKER LIC	1993	No	
REAL ESTATE CERTI	1990	Yes	No
REAL ESTATE LICENSE	1996	Yes	Yes
REAL ESTATE LICENSE	1987	Yes	No
REFRIGERATION REPAIR CERT	1988	No	No
REG HEALTH INFO TECH	1998	Yes	No
REGISTERED DIETICIAN	1992	Yes	Yes
REGISTERED NURSE	1980	Yes	Yes
REGISTERED NURSE		Yes	Yes
REGISTERED NURSE	1972	No	No
RETAIL MANAGEMENT CERT	1975	Yes	Yes
RN	1981	Yes	Yes
RN	1970	Yes	Yes
RN	1960	No	No
RN LICENSE	2001	Yes	Yes
RN LICENSE	1985	Yes	Yes
RN NURSING	1985	Yes	Yes
RPR	1993	No	No
RV REPAIR SYSTEM			
SALES CERTIFICATES	2001	Yes	Yes
SECONDARY EDUCATION	1965	Yes	No
SECRETARIAL BUSINESS DEG	1965	Yes	Yes
SECRETARIAL CERT	1980	Yes	No
SECRETARY BUSINESS DEGREE	1944	No	No
SERVICE TECHNICIAN	2000	Yes	Yes
SKILLED MECHANICS SASE CE		Yes	No
SOCIAL WORK LICENSE	2000	Yes	Yes
SOCIALWORK (B.S.)	1999	Yes	No
SOFTWARE	1990	Yes	No
SPEC ED ASST LICENSE	1996	Yes	Yes
SPECIALIST DEG. IN ED.ADM	1980	Yes	No
STATE OF MN MED LICENSE	1986	Yes	Yes
STATE OF MN TEACHING LIC	1970	Yes	Yes
STATE TEACHING LICENSE	1994	No	No
STEAM FITTER LICENSE	1972	Yes	Yes
STORE MANAGEMENT LICENSE	1981	No	No
STRESS IN WORKPLACE	1996	Yes	No
SUPERINTENDANT LICENSE	1980	Yes	Yes
SUPERINTENDENT LICENSE	1996	Yes	No
SUSPENSION EXPERT (CERT.)	2000	Yes	Yes
SYSTEMS INSTALLATION	1984	Yes	Yes
TEACHER LICENSE	1999	Yes	Yes
TEACHER LICENSE	1982	No	No
TEACHING	2000	Yes	Yes
TEACHING	1952	Yes	No
TEACHING (BA)	1948		No
TEACHING CERT	1970	Yes	Yes
TEACHING CERT	1997	Yes	Yes
TEACHING DEGREE	1974	Yes	Yes
TEACHING DEGREE	1953	Yes	No
TEACHING DEGREE	1962	Yes	No
TEACHING DEGREE	1979	No	No
TEACHING DEGREE	1949	No	No

TEACHING ELEMENTARY	1979	No	No
TEACHING LICENSE	1997	Yes	Yes
TEACHING LICENSE	1977	Yes	Yes
TEACHING LICENSE	1995	Yes	No
TEACHING LICENSE	2001	Yes	No
TEACHING LICENSE FOR MN	1997	Yes	Yes
TECH COLL TEACH LICENSE	2000	Yes	Yes
TECHINAL DIPLOMA	1998	Yes	No
TELEPHONE OPERATING CERT	1948	No	No
TRANSMISSION CERT		Yes	Yes
TRANSPORTATION	1990	No	No
TRAVEL AGENT CERT	1998	Yes	Yes
U OF M DEGREE	1970	Yes	Yes
US AIRFORCE	2000	Yes	Yes
WELDING CERTIFICATES	1970	No	No
WELDING CERTIFIED		Yes	No
WELDING DEGREE	1971	Yes	Yes
WI CERTIFIED COUNSELOR	1997	Yes	Yes
WITC SUPERIOR CLGE COMPUT		No	No
WORD PROCESSING TRAINING		Yes	No
WORK RELATED CERTIFICATES	2001	Yes	Yes
WORK WITHIN 5 FT ELECTRICAL HAZARD	2000	No	No
YOUNG CHILD DEVELOPMENT	1980	No	

**2001 Survey of Firms  
Northeastern Minnesota**

Final Report  
December 2001

Bureau of Business and Economic Research  
School of Business and Economics  
University of Minnesota Duluth  
Duluth, MN 55812



## Executive Summary

The 2001 telephone survey of Northeast Minnesota firms was conducted during October and November 2001. Historic events such as the market downturn and the September 11<sup>th</sup> terrorist attack on New York's Trade Center should be kept in mind as a context for these data. The random sample of firms was stratified by firm size and county, including the Port Cities. The three size strata (0-19, 20-99, 100+) were dictated by the way the available list of firms was aggregated. A knowledgeable official (usually the owner) was interviewed. The final sample of 298 firms had a response rate of 79%. Data are weighted to be representative of all firms of record in the region. The report provides comparisons by firm size and also by Port Cities and the Range.

Average firm size is 8.6 employees for small firms, 35.5 for medium sized firms and 204 for large firms. They reported having, respectively, 2.7, 17.6 and 54.1 job openings in the past year. Firms were asked the number of employees they expected to hire in the following year for two jobs that were most critical to their business. Small firms expect to hire 2 such employees, medium firms 13 and large firms 29. Eighty percent expect critical-job employees to be readily available or available with some effort. Critical jobs are listed in Appendix B. However, one quarter (28%) of respondents have concerns about the availability of a suitable labor force in 2-3 years, higher for larger firms (70%) than for small firms (24%).

On average 17% of employees are union members (15.5% for small firms to 45.8% for large firms). Some 93.6% of firms with union members report that the union-management relationship is satisfactory to highly successful. Only about 5% of these firms say they have a combative relationship.

Firms were asked about expected change in their use of employees in nine standard job categories and these data provide a rich insight into expected hiring patterns. Most companies expected no change. A larger percent of large firms expect to use fewer employees. Over 10% of large firms expect to use fewer handlers, executives, professionals, clerical, and service employees. A higher percentage of medium sized firms expect to use more employees in each category except sales and service occupations where a greater percentage of larger firms expect to use more and handlers where a larger percent of small firms expect to use more.

A series of questions dealt with the firm's use of the internet and its expected impact. Overall, firms report that about 8% of their communication with customers is by e-mail, higher for larger firms (24.6%) than for small firms (7.5%). Three quarters of medium sized firms, two-thirds of large firms, and half of small firms expect the internet to have an impact on their business in the next 2-3 years. Impacts are seen as potentially positive except for a concern that it will increase competition. Most (80%) feel their current labor force is equipped to handle internet developments.

A quarter of all firms in the region export products or services outside the region (23% of small firms, 41% for medium and 51% of large firms). About 70% of firms had business relationships with firms in the Twin Cities but only 10% (8.7% for small firms and 20.8% for large firms) with firms in two cities in Canada (Thunder Bay and Winnipeg). About 28% had a business relationship with a medical firm in the region, 9% with aviation firms in the region and 14% with various units within the University of Minnesota Duluth. In most cases, only slight changes were expected in these categories of business relationships.

Finally, about 70% of firms felt that the business climate for their firm in the region was good or excellent (21.9% felt it was “fair” and 7.8% felt it was poor or very poor for them). A third said the business climate had improved in the last 2-3 years, a 20.4% felt it had declined and 44.7% felt there had been little or no change. Comments about declines pointed to things related to the general economy.

Comparisons of Range and Port City firms on survey items show relatively few statistically significant differences. There was some difference in expectations for use of professional, executive, clerical and service occupations (Port Cities generally expect to use more). Range firms, on average, used e-mail more (9.4% vs. 5.5%) and expect the internet to have an impact on their business in the next 2-3 years (59.9% vs. 37.1% for Port Cities firms). Range firms were more likely than Port Cities firms to feel both that employees for critical jobs were readily available and probably not available. Port Cities firms were more likely than Range firms to have business relationships with firms in Canada, the Twin Cities and regional medical firms. Range firms were more likely to have relationships with regional aviation firms or units of UMD. Range and Port Cities firms did not differ significantly in their assessment of the business climate.

## Background

During October and November 2001, the Bureau of Business and Economic Research at the University of Minnesota Duluth conducted its third survey of firms in the northeast region of Minnesota. A stratified random sample of firms was used, stratified by size (0-19, 20-99, 100 or more employees) and by counties and the Port Cities areas. Counties included in this region are Aitkin, Carlton, Cook, Itasca, Koochiching, Lake and St Louis plus adjacent Crow Wing county and Superior (Douglas County) in Wisconsin. The size of a firm's categories is a consequence of aggregated size groupings used in official records of firms in the area. A knowledgeable, high-ranking person in each firm was contacted by telephone for the interview. Data have been weighted to represent all firms in Northeastern Minnesota.

As in earlier surveys, telephone interviews were conducted by the Minnesota Center for Survey Research at the University of Minnesota. Follow-up calls helped assure that a higher percentage of the intended sample was included. A response rate of 79% (percent of those actually contacted and able to be interviewed) was achieved for a final sample of 298 firms.

The survey included questions about a firm's experience with their business climate, their employees, critical jobs and labor market concerns and expectations for finding a suitable labor force, job openings and expectations for job openings, the role of internet communications in their business, types of firms with which they had business relationships, and other characteristics of their business.

Readers of this report should remember the temporal context of these data. Interviewing started on October 5<sup>th</sup> and ended on November 9<sup>th</sup>. This was after several months of weakening economic activity especially in mining on the Range, extensive layoffs and sharp stock market declines, plus the September 11<sup>th</sup> terrorist attack on the New York Trade Center and the following anthrax scare. Results of the survey probably reflect concern, caution and uncertainty related to these preceding events.

This report provides data contrasting firms in two ways, first by size (Tables 1-6) and then by area (Range and Port Cities, Tables 7-12). Among the strengths of this survey are that it includes all businesses of record from the smallest with no official employees beyond the owner to very large firms. Almost 90% of firms have fewer than 20 employees.

## Results Comparing Firms of Different Sizes

Table 1 lists information about firms, divided by size of firm. The average number of full-time employees confirms the size strata, 8.6 employees for small firms (which compose about 90% of all firms of record in the region), 35.5 employees for medium sized firms, and 204.0 employees for large firms. Overall, firms in the region average 14.1 employees, an average that masks considerable variation. Only about 17% of current employees are union members, ranging from 15.5% for small firms to 45.8% for large firms. The vast majority of respondents of firms with union employees report that the union-management relationship is satisfactory to highly successful (93.6%). Only about 5% of firms report that they have a combative relationship.

In the past year, firms reported having job openings, 2.7 for small firms, 17.6 for medium sized firms and 54.1, on average, for largest firms. When asked about hiring in the two jobs that are most critical to their firm over the next 2-3 years they report, on average, hiring 3.5 workers, 2.0 for the first listed and 1.5 for the second listed critical job. These figures vary by firm size from 2.0 employees in the two critical jobs for small firms to 28.9 employees in these jobs for large firms. Nevertheless, 28% of firms report concerns about the availability of a suitable labor force in the next 2-3 years. Their concerns are listed in Appendix A. Larger firms are more likely to express concern (70% vs. 52% for medium sized firms and 24% for small firms).

About a quarter of all firms in the region export their products or services outside the region, 23% of small firms, 41% of medium sized firms, and 51% of large firms. Small, medium and large firms are distributed among counties and the Port Cities in approximately the same way. There is no statistically significant difference in these data among the categories.

Respondents who provided information about firms have been in the region and with their business for considerable amounts of time (see Table 2). On average they have been in the region for 32.2 years and have spent 12.4 years in their current firm. Respondents generally were owners, CEO's, business managers, directors, or human resource managers of the firm for which they responded. Interviewers were asked to provide a rough rating of their cooperativeness (79% very cooperative) and their apparent level of knowledge (70% very knowledgeable), factors that help in gauging the quality of the data.



**Table 1**  
**Characteristics of Firms and Their Labor Force, by Firm Size**  
**Northeast Minnesota Survey of All Firms, 2001<sup>23</sup>**

Items	Small Firms (0-19)	Medium (20-99)	Large Firms (100+)	Overall <sup>24</sup>	sig <sup>25</sup>
Average number of full-time equivalent employees in the firm	8.6 (106) <sup>26</sup>	35.5 (109)	204.0 (80)	14.1 (295)	sig
Average percent of current employees who are union members	15.5% (106)	26.2% (107)	45.8% (81)	17.0% (295)	sig
Character of union-management Relations among those with some union employees.					
Highly successful	23.8%	2.7%	10.4%	18.8%	
Good working relationship	42.9	59.5	58.3	46.2	
Satisfactory relationship	28.6	37.8	29.2	28.6	ns
Poor relationship	0.0	0.0	0.0	1.4	
Combative relationship	<u>4.8</u>	<u>0.0</u>	<u>2.1</u>	<u>5.0</u>	
	100%	100%	100%	100%	
	(21)	(37)	(48)	(65)	
Average number of job openings firms needed to fill in the past year (Oct 2000 to Oct 2001)	2.7 (106)	17.6 (98)	54.1 (78)	4.8 (293)	sig
Average number of employees expect to hire into listed critical jobs in the next 2-3 years (see Appendix B for a list of critical job needs)	1.1 (103)	7.9 (100)	16.5 (73)	2.0 (286)	sig
First critical job listed	0.9 (85)	5.1 (89)	12.4 (70)	1.5 (238)	sig
Second critical job listed					
Percent with concerns about the availability of a suitable labor force in the next 2-3 years. (See appendix A for a list of concerns)	24.5% (106)	52.3% (109)	69.5% (82)	28.0% (297)	sig
Percentage of firms that ship products/provide services outside Northeast Minnesota (or northwest Wisconsin for Douglas County firms)	23.4% (107)	41.3% (109)	51.2% (82)	25.3% (297)	sig

<sup>23</sup> A random sample of 298 firms of all sizes of record in Northeast Minnesota and Douglas County, Wisconsin was stratified by firm size and county location. Telephone interviews were conducted with a knowledgeable official in each firm during October and November 2001 (after the September 11<sup>th</sup> New York tragedy). The overall response rate was ...

<sup>24</sup> The overall figures have been weighted to take account of the distribution of firm size across counties. This column is representative of all businesses.

<sup>25</sup> The chi square or ANOVA tests of significance of difference were used. Sig refers to differences between firm sizes that are statistically significant at the .05 level. Ns indicate that differences in the sample are not statistically significant.

<sup>26</sup> The number in parentheses is the number of firms on which the percentage or average is computed.

Items	Small Firms (0-19)	Medium (20-99)	Large Firms (100+)	Overall	sig
Location of business					
Aitkin	3.7%	2.8%	1.2%	3.8%	
Carlton	6.5	5.6	7.3	6.4	
Cook	2.8	1.9	2.4	2.8	
Crow Wing	13.1	12.0	14.6	13.3	
Itasca	11.2	8.3	9.8	10.7	
Koochiching	4.7	2.8	1.2	4.3	ns
Lake	2.8	2.8	1.2	2.7	
St Louis, Range	20.6	20.4	19.5	20.6	
Duluth	27.1	33.3	32.9	27.6	
Douglas County (Superior), Wisconsin	<u>7.5</u>	<u>9.3</u>	<u>9.8</u>	<u>7.8</u>	
	100%	100%	100%	100%	
	(107)	(108)	(82)	(298)	

**Table 2**  
**Characteristics of Respondents, by Firm Size**  
**Northeast Minnesota Survey of All Firms, 2001<sup>27</sup>**

Items	Small Firms (0-19)	Medium (20-99)	Large Firms (100+)	Overall <sup>28</sup>	sig <sup>29</sup>
Average number of years respondent has lived in Northeast Minnesota (northwest Wisconsin for Douglas County firms)	32.5 (103) <sup>30</sup>	29.8 (105)	27.8 (81)	32.2 (287)	ns
Average number of years respondent has been with this business	12.3 (107)	13.4 (109)	11.1 (82)	12.4 (298)	ns
Interviewer rating of respondent cooperativeness	80.4%	65.1%	73.2%	78.6%	
Very cooperative	16.8	31.2	23.2	18.2	ns
Somewhat cooperative	<u>2.8</u>	<u>3.7</u>	<u>3.7</u>	<u>3.2</u>	
Not very cooperative	100%	100%	100%	100%	
	(107)	(109)	(82)	(298)	

<sup>27</sup> A random sample of 298 firms of all sizes of record in Northeast Minnesota and Douglas County, Wisconsin was stratified by firm size and county location. Telephone interviews were conducted with a knowledgeable official in each firm during October and November 2001 (after the September 11<sup>th</sup> New York tragedy). The overall response rate was ...

<sup>28</sup> The overall figures have been weighted to take account of the distribution of firm size across counties. This column is representative of all businesses.

<sup>29</sup> The chi square or ANOVA tests of significance of difference were used. Sig refers to differences between firm sizes that are statistically significant at the .05 level. Ns indicate that differences in the sample are not statistically significant.

<sup>30</sup> The number in parentheses is the number of firms on which the percentage or average is computed.

Interviewer rating of respondent's level of knowledge	70.1%	65.1%	65.9%	69.5%	
Very knowledgeable	27.1	32.1	30.5	27.4	
Somewhat knowledgeable	<u>2.8</u>	<u>2.8</u>	<u>3.7</u>	<u>3.2</u>	ns
Not very knowledgeable	100%	100%	100%	100%	
	(107)	(109)	(82)	(298)	

Table 3 has information on expected changes over the next 2-3 years in a series of 9 standard job categories. Firms were asked whether they used employees of a given job category and, if so, whether they expected to use fewer or more employees in that category or whether they expect no change. The percent distribution for each job category and size of firm is given in Table 3. Except for firms with precision production, craft or repair employees, firms of different sizes expressed statistically significant differences in their hiring expectations. Most companies, however, expect no change in any of the job categories.

For convenience in analysis, these data are reorganized in Table 3a where percentages are grouped separately for each of the response categories. Few (0.0% to 1.9%) of small firms expect to use fewer employees in any of the nine job categories. Medium sized firms are more likely than small firms to expect to use fewer employees in each job category (2.8% to 11.2% of firms). They expect to use about ten percent fewer professional or executive employees (11.2% and 10.3% respectively). A higher percentage of large firms expect to use fewer employees as compared to small and medium sized firms (1.2% to 17.3% of firms). The exception is for the sales category where only 1.2% of large firms expect to use fewer. Over ten percent of large firms expect to use fewer handlers (17.3%), executive (16.9%) professional (14.8%), clerical (13.4%), and service (10.1%) employees.

Panel b in Table 3a shows the percentage of firms who expect no change. In general about two-thirds of firms expect no change (ranging from 60.7% to 86.9%, depending on worker category). In each case, a higher percentage of small firms expect no change than is true of firms of larger size and a slightly lower percentage of larger firms expect no change.

Panel c in Table 3a provides information on the percentage of firms who expect to use more of a given employee category. These range, overall, from 4.4% of firms expecting to use more machine operators to 29.6% expecting to use more professional employees. In all but 3 categories, a higher percentage of medium sized firms expect to use more of a given category of employees. Exceptions are service and sales occupations, where the larger the firm, the more likely it is to expect to use more employees, and handlers where the smaller the firm, the more likely it is to expect an increase in employees of that type. Except for transportation and handler workers, small firms are less likely than larger firms to expect an increase in use of employees in a given category.

Overall, over a fifth of firms do not have employees in precision production, machine operators, transportation or handler occupations. All but 2.3% of firms have employees in the professional category. Interestingly, the larger the firm the less likely it is to have sales occupations (9.5% of small firms, 14.7% of medium sized firms and 32.5% of large firms do not have employees in this category). This same relationship can be found for service occupations, precision production, and machine operators.

**Table 3**  
**Expected Change In Selected Employment Categories in Their Firm, by Firm Size**  
**Northeast Minnesota Survey of All Firms, 2001<sup>31</sup>**

Items	Small Firms (0-19)	Medium (20-99)	Large Firms (100+)	Overall <sup>32</sup>	sig <sup>33</sup>
Professional, paraprofessional and technical employees	0.0%	11.2%	14.8%	1.5%	
Expect to use fewer	68.6	49.5	53.1	66.6	sig
Expect no change	28.6	37.4	32.1	29.6	
Expect to use more	<u>2.9</u>	<u>1.9</u>	<u>0.0</u>	<u>2.3</u>	
Do not have this type of employee	100% (105) <sup>34</sup>	100% (107)	100% (81)	100% (294)	
Executive, administrator, manager employees					
Expect to use fewer	1.0%	10.3%	16.9%	1.9%	
Expect no change	89.3	70.1	66.3	86.9	sig
Expect to use more	6.8	19.6	16.9	8.5	
Do not have this type of employee	<u>2.9</u> 100% (103)	<u>0.0</u> 100% (107)	<u>0.0</u> 100% (83)	<u>2.7</u> 100% (290)	
Sales and related occupation employees					
Expect to use fewer	1.9%	6.4%	1.2%	1.9%	
Expect no change	70.5	59.6	43.4	69.3	sig
Expect to use more	18.1	19.3	22.9	18.2	
Do not have this type of employee	<u>9.5</u> 100% (105)	<u>14.7</u> 100% (109)	<u>32.5</u> 100% (83)	<u>10.6</u> 100% (293)	
Clerical and administrative employees					
Expect to use fewer	0.0%	4.7%	13.4%	1.0%	
Expect no change	81.9	67.0	67.1	79.9	sig
Expect to use more	12.4	26.4	19.5	13.6	
Do not have this type of employee	<u>5.7</u> 100% (105)	<u>1.9</u> 100% (106)	<u>0.0</u> 100% (82)	<u>5.6</u> 100% (293)	

<sup>31</sup> A random sample of 298 firms of all sizes of record in Northeast Minnesota and Douglas County, Wisconsin was stratified by firm size and county location. Telephone interviews were conducted with a knowledgeable official in each firm during October and November 2001 (after the September 11<sup>th</sup> New York tragedy). The overall response rate was ...

<sup>32</sup> The overall figures have been weighted to take account of the distribution of firm size across counties. This column is representative of all businesses.

<sup>33</sup> The chi square or ANOVA tests of significance of difference were used. Sig refers to differences between firm sizes that are statistically significant at the .05 level. Ns indicate that differences in the sample are not statistically significant.

<sup>34</sup> The number in parentheses is the number of firms on which the percentage or average is computed.

Items	Small Firms (0-19)	Medium (20-99)	Large Firms (100+)	Overall	sig
Precision production, craft, repair employees					
Expect to use fewer	1.9%	6.6%	6.1%	2.1%	
Expect no change	61.3	57.5	50.0	60.7	ns
Expect to use more	13.2	16.0	14.6	13.6	
Do not have this type of employee	<u>23.2</u>	<u>19.8</u>	<u>29.3</u>	<u>23.7</u>	
	100%	100%	100%	100%	
	(106)	(106)	(82)	(293)	
Machine operators, assemblers, inspector employees					
Expect to use fewer	1.0%	4.7%	8.6%	1.7%	
Expect no change	62.9	54.2	34.6	61.2	sig
Expect to use more	3.8	12.4	12.3	4.4	
Do not have this type of employee	<u>32.4</u>	<u>35.5</u>	<u>44.4</u>	<u>32.8</u>	
	100%	100%	100%	100%	
	(105)	(107)	(81)	(293)	
Transportation, material moving employees					
Expect to use fewer	0.9%	2.9%	8.6%	1.5%	
Expect no change	66.0	50.5	50.6	64.2	sig
Expect to use more	8.5	12.4	7.4	8.6	
Do not have this type of employee	<u>24.5</u>	<u>34.3</u>	<u>33.3</u>	<u>25.7</u>	
	100%	100%	100%	100%	
	(106)	(105)	(81)	(296)	
Handlers, equipment cleaners, helpers, laborer employees					
Expect to use fewer	0.9%	2.8%	17.3%	1.6%	
Expect no change	63.6	60.4	59.3	63.2	sig
Expect to use more	15.9	13.2	12.3	15.3	
Do not have this type of employee	<u>19.6</u>	<u>23.6</u>	<u>11.1</u>	<u>19.9</u>	
	100%	100%	100%	100%	
	(107)	(106)	(81)	(296)	
Service occupations					
Expect to use fewer	1.9%	3.7%	10.1%	1.9%	
Expect no change	79.4	61.7	53.2	77.6	sig
Expect to use more	11.2	22.4	22.8	12.5	
Do not have this type of employee	<u>7.5</u>	<u>12.1</u>	<u>13.9</u>	<u>8.1</u>	
	100%	100%	100%	100%	
	(107)	(107)	(79)	(297)	

**Table 3a**  
**Expected Change In Selected Employment Categories in Their Firm, by Firm Size**  
**Northeast Minnesota Survey of All Firms, 2001<sup>35</sup>**

**a) Percent of firms who expect to use fewer**

<b>Items</b>	<b>Small Firms (0-19)</b>	<b>Medium (20-99)</b>	<b>Large (100+)</b>	<b>Overall<sup>36</sup></b>
Professional, paraprofessional and technical employees	0.0%	11.2%	14.8%	1.5%
Executive, administrator, manager employees	1.0%	10.3%	16.9%	1.9%
Sales and related occupation employees	1.9%	6.4%	1.2%	1.9%
Clerical and administrative employees	0.0%	4.7%	13.4%	1.0%
Precision production, craft, repair employees	1.9%	6.6%	6.1%	2.1%
Machine operators, assemblers, inspector employees	1.0%	4.7%	8.6%	1.7%
Transportation, material moving employees	0.9%	2.9%	8.6%	1.5%
Handlers, equipment cleaners, helpers, laborer employees	0.9%	2.8%	17.3%	1.6%
Service occupations	1.9%	3.7%	10.1%	1.9%

**b) Percent of firms who expect no change**

<b>Items</b>	<b>Small Firms (0-19)</b>	<b>Medium (20-99)</b>	<b>Large (100+)</b>	<b>Overall</b>
Professional, paraprofessional and technical employees	68.6%	49.5%	53.1%	66.6%
Executive, administrator, manager employees	89.3%	70.1%	66.3%	86.9%
Sales and related occupation employees	70.5%	59.6%	43.4%	69.3%
Clerical and administrative employees	81.9%	67.0%	67.1%	79.9%
Precision production, craft, repair employees	61.3%	57.5%	50.0%	60.7%
Machine operators, assemblers, inspector employees	62.9%	54.2%	34.6%	61.2%
Transportation, material moving employees	66.0%	50.5%	50.6%	64.2%
Handlers, equipment cleaners, helpers, laborer employees	63.6%	60.4%	59.3%	63.2%
Service occupations	79.4%	61.7%	53.2%	77.6%

<sup>35</sup> A random sample of 298 firms of all sizes of record in Northeast Minnesota and Douglas County, Wisconsin was stratified by firm size and county location. Telephone interviews were conducted with a knowledgeable official in each firm during October and November 2001 (after the September 11<sup>th</sup> New York tragedy). The overall response rate was ...

<sup>36</sup> The overall figures have been weighted to take account of the distribution of firm size across counties. This column is representative of all businesses.

**c) Percent of firms who expect to use more**

<b>Items</b>	<b>Small Firms (0-19)</b>	<b>Medium (20-99)</b>	<b>Large (100+)</b>	<b>Overall</b>
Professional, paraprofessional and technical employees	28.6%	37.4%	32.1%	29.6%
Executive, administrator, manager employees	6.8%	19.6%	16.9%	8.5%
Sales and related occupation employees	18.1%	19.3%	22.9%	18.2%
Clerical and administrative employees	12.4%	26.4%	19.5%	13.6%
Precision production, craft, repair employees	13.2%	16.0%	14.6%	13.6%
Machine operators, assemblers, inspector employees	3.8%	12.4%	12.3%	4.4%
Transportation, material moving employees	8.5%	12.4%	7.4%	8.6%
Handlers, equipment cleaners, helpers, laborer employees	15.9%	13.2%	12.3%	15.3%
Service occupations	11.2%	22.4%	22.8%	12.5%

**d) Percent of firms who do not have this category of employee**

<b>Items</b>	<b>Small Firms (0-19)</b>	<b>Medium (20-99)</b>	<b>Large (100+)</b>	<b>Overall</b>
Professional, paraprofessional and technical employees	2.9%	1.9%	0.0%	2.3%
Executive, administrator, manager employees	2.9%	0.0%	0.0%	2.7%
Sales and related occupation employees	9.5%	14.7%	32.5%	10.6%
Clerical and administrative employees	5.7%	1.9%	0.0%	5.6%
Precision production, craft, repair employees	23.2%	19.8%	29.3%	23.7%
Machine operators, assemblers, inspector employees	32.4%	35.5%	44.4%	32.8%
Transportation, material moving employees	24.5%	34.3%	33.3%	25.7%
Handlers, equipment cleaners, helpers, laborer employees	19.6%	23.6%	11.1%	19.9%
Service occupations	7.5%	12.1%	13.9%	8.1%

Table 4 includes information about impact of the internet upon a firm and the availability of employees who are able to use the internet or who work in two of the jobs deemed to be most critical to a company. Overall, firms report that about 8% of their communication with customers occurs by e-mail. This figure is higher for larger firms (7.5% for small firms, 10.2% for medium firms, and 24.6% for large firms).

There is also a statistically significant difference by size of firm in their expectation that the internet will have an effect on their business in the upcoming 2-3 years. Nearly three-quarters of medium firms and two-thirds of large firms, but only half of small firms expect their business to be impacted by the internet. A listing of the effects they see is given in Appendix C. In the vast majority of cases the apparent impact is seen as potentially positive although there is some concern about the internet increasing competition.

Eighty percent of firms feel that their current labor force is equipped to face internet developments. Of those who feel their current labor force is not equipped, over half (57.1%) expect to train workers themselves, 3.5% expect to hire new workers who are equipped to handle the internet, and 24.8% expect to outsource the training. Use of these options does not differ significantly by firm size.

When asked about the availability of a suitable labor force in the next 2-3 years for the two most critical jobs in their firm, over 80% of firms, on average, expect that a suitable labor force will be readily available or available with some effort. Less than 20% expect that a suitable labor force for their two most critical jobs will probably not be available in the next 2-3 years. There are differences by firm size. In general, smaller firms expect critical workers to be more readily available and larger firms expect that hiring will involve greater effort or that suitable employees may not be available.

Appendix B lists critical job titles, the number of employees of these types that firms expect to need and their estimate of the availability of these employees.



**Table 4**  
**Expected Effects of Internet on Their Firm, by Firm Size**  
**Northeast Minnesota Survey of All Firms, 2001<sup>37</sup>**

Items	Small Firms (0-19)	Medium Size (20-99)	Large Firms (100+)	Overall <sup>38</sup>	sig <sup>39</sup>
Average percentage of communications with customers that is by e-mail	7.5% (107) <sup>40</sup>	10.2% (108)	24.6% (75)	8.0% (296)	sig
Percent who expect that the internet will have an effect on their business in the next 2-3 years (see Appendix C for list of effects)	49.0% (104)	72.5% (109)	63.3% (79)	51.7% (291)	sig
Percent who feel the current labor force is equipped to face internet developments	79.8% (104)	87.4% (103)	82.9% (76)	80.4% (290)	ns
Main way their firm will gain work force internet skills among those who feel current labor force is not equipped to face internet developments					
Train current workers	52.6%	84.6%	76.9%	57.1%	
Hire new workers	5.3	0.0	7.7	3.5	ns
Outsource	26.3	15.4	0.0	24.8	
Some other way	<u>15.8</u>	<u>0.0</u>	<u>15.4</u>	<u>14.5</u>	
	100%	100%	100%	100%	
	(19)	(13)	(13)	(50)	

Questions in the firm survey asked about current and future business relationships with firms in areas that may provide opportunities for Northeast Minnesota businesses. The highest percentage of firms, overall, had business relationships with firms in the Twin Cities (69% currently and 70% expecting such relationships in the future). Only about 10% had relationships with firms in two major cities to the north, Thunder Bay and Winnipeg, Canada, although a greater percentage of firms expected future relationships with Winnipeg (6.1% currently vs. 9.4% in the future). Firm size is statistically related to having current business relationships with firms in Thunder Bay; the larger the firm the more likely they are to have such relationships (8.7% to 20.8%).

Medical and aviation firms are important non-extractive businesses in the region and the survey asked about relationships with them. About 28% of firms have a business relationship with a medical firm in the region (but 27% expect to have such a relationship in the future). Both current and expected future relationships vary significantly by firm size with a higher percentage of larger firms having or expecting relationships with medical firms in the region.

<sup>37</sup> A random sample of 298 firms of all sizes of record in Northeast Minnesota and Douglas County, Wisconsin was stratified by firm size and county location. Telephone interviews were conducted with a knowledgeable official in each firm during October and November 2001 (after the September 11<sup>th</sup> New York tragedy). The overall response rate was ...

<sup>38</sup> The overall figures have been weighted to take account of the distribution of firm size across counties. This column is representative of all businesses.

<sup>39</sup> The chi square or ANOVA tests of significance of difference were used. Sig refers to differences between firm sizes that are statistically significant at the .05 level. Ns indicate that differences in the sample are not statistically significant.

<sup>40</sup> The number in parentheses is the number of firms on which the percentage or average is computed.

About 9% of firms currently have a business relationship with aviation firms in the region. Significantly more medium sized firms (20.2%) than small sized firms (7.6%) or large firms (14.1%) have business relationships with regional aviation firms. Overall, a higher percentage of firms expect future relationships with aviation firms in the region (8.8% currently to 14.2% in the future).

One resource for business development is the various units of the University of Minnesota Duluth. Overall, 14% of firms have a relationship with a unit at the University and 24% expect that they will in the future. These differences are not statistically significant by size of firm.

**Table 5**  
**Business Relationships, by Firm Size**  
**Northeast Minnesota Survey of All Firms, 2001<sup>41</sup>**

Items	Small Firms (0-19)	Medium Size (20-99)	Large Firms (100+)	Overall <sup>42</sup>	sig <sup>43</sup>
Percent with <i>current business relationships</i> with firms in:					
Thunder Bay, Canada	8.7%	11.1% (108)	20.8% (77)	9.0% (286)	sig
Winnipeg, Canada	(103) <sup>44</sup>	7.4% (108)	8.6% (70)	6.1% (296)	ns
Twin Cities	5.7% (106)	79.8% (109)	84.0% (81)	69.0% (297)	sig
Medical firms in Northeast Minnesota	67.3% (107)	56.9% (109)	65.4% (78)	28.0% (298)	sig
Aviation firms in Northeast Minnesota	24.3% (107)	23.9% (109)	25.0% (76)	14.4% (294)	ns
Units at the University of Minnesota	7.6% (105)	13.2% (106)			
Percent <i>expecting future business relationships</i> with firms in:					
Thunder Bay, Canada	11.2%	10.4% (106)	18.6% (70)	10.9% (295)	ns
Winnipeg, Canada	(107)	13.0% (108)	11.9% (67)	9.4% (295)	ns
Twin Cities	9.3% (107)	80.4% (107)	84.8% (79)	69.9% (295)	sig
Medical firms in Northeast Minnesota	68.9% (106)	56.5% (108)	63.5% (74)	27.2% (296)	sig
Aviation firms in Northeast Minnesota	23.6% (106)	32.0% (103)	37.0% (73)	23.8% (287)	ns
Units at the University of Minnesota	13.3% (105)	22.3% (103)			

<sup>41</sup> A random sample of 298 firms of all sizes of record in Northeast Minnesota and Douglas County, Wisconsin was stratified by firm size and county location. Telephone interviews were conducted with a knowledgeable official in each firm during October and November 2001 (after the September 11<sup>th</sup> New York tragedy). The overall response rate was ...

<sup>42</sup> The overall figures have been weighted to take account of the distribution of firm size across counties. This column is representative of all businesses.

<sup>43</sup> The chi square or ANOVA tests of significance of difference were used. Sig refers to differences between firm sizes that are statistically significant at the .05 level. Ns indicate that differences in the sample are not statistically significant.

<sup>44</sup> The number in parentheses is the number of firms on which the percentage or average is computed.

Finally, firms were asked about the business climate for their business in the region. Responses are shown in Table 6, below. About 70% said that the business climate was “good” or “excellent” for their business. Some 21.9% felt it was “fair” and 7.8% felt it was “poor” or “very poor”. Responses to this question are similar for firms of different sizes.

Respondents were asked about changes in the business climate for their firm over the last 2-3 years and 34.9% said they felt it had improved. A fifth (20.4%) felt it had declined for their firm and 44.7% felt there had been little or no change. Appendices D and E provide a listing of comments about the way in which the business climate has improved or declined over the past 2-3 years.

**Table 6**  
**Assessment of the Business Climate for Their Business, by Firm Size**  
**Northeast Minnesota Survey of All Firms, 2001<sup>45</sup>**

Items	Small Firms (0-19)	Medium Size (20-99)	Large Firms (100+)	Overall <sup>46</sup>	sig <sup>47</sup>
Rating of the business climate for their business in Northeast Minnesota (or northwest Wisconsin for Douglas County firms)					
Excellent	16.3%	11.1%	11.5%	15.8%	
Good	53.8	58.3	55.1	54.5	ns
Fair	22.1	21.3	23.1	21.9	
Poor	7.7	4.6	3.8	7.3	
Very Poor	<u>0.0</u>	<u>4.6</u>	<u>6.4</u>	<u>0.5</u>	
	100%	100%	100%	100%	
	(104) <sup>48</sup>	(108)	(78)	(290)	
Report of how the business climate has changed in the last 2-3 years for their business.					
Improved (see Appendix D)	34.7%	35.2%	34.6%	34.9%	
Little or no change	45.9	38.0	37.0	44.7	ns
Declined (see Appendix E)	<u>19.4</u>	<u>26.9</u>	<u>28.4</u>	<u>20.4</u>	
	100%	100%	100%	100%	
	(98)	(108)	(81)	(276)	

<sup>45</sup> A random sample of 298 firms of all sizes of record in Northeast Minnesota and Douglas County, Wisconsin was stratified by firm size and county location. Telephone interviews were conducted with a knowledgeable official in each firm during October and November 2001 (after the September 11<sup>th</sup> New York tragedy). The overall response rate was ...

<sup>46</sup> The overall figures have been weighted to take account of the distribution of firm size across counties. This column is representative of all businesses.

<sup>47</sup> The chi square or ANOVA tests of significance of difference were used. Sig refers to differences between firm sizes that are statistically significant at the .05 level. Ns indicate that differences in the sample are not statistically significant.

<sup>48</sup> The number in parentheses is the number of firms on which the percentage or average is computed.

## Results Comparing Range and Port Cities Firms

Tables 7 through 12 show data from the same questions as discussed above, but arranged to compare responses from Range and Port Cities firms. These data have been weighted to take account of the distribution of small, medium and large firms in the different areas.

The average number of full-time equivalent employees does not appear to differ significantly between Range and Port City firms. On average, there are 14.1 employees. On average 17% of the firms have union employees and that does not differ significantly by area, however the assessment of the management-union relationship does differ. In general, Port Cities firms find the relationship both more positive (82.3% find it good or highly successful), but also more combative than the range (17.6% of Port Cities firms felt the relationship was combative versus none of the Range firms).

As indicated in Table 7, the average number of job openings last year was about 4.8. Port Cities firms report expecting to hire more of the first critical job they listed (3.6 employees vs. 1.1 for Range firms). About 1.5 for the second listed critical job is expected to be hired in the next 2-3 years.

A quarter of both Port Cities and Range firms provide products and services outside the area. The percentage of firms in each of the size strata is not significantly different by area. Overall, 89% of the region's stock of firms has 0-19 employees.

Table 8 shows characteristics of the respondent. Port Cities' respondents had lived in the region somewhat longer (35.2 years vs. 30.4 years for Range firm respondents). They have been with their firm approximately the same number of years, 12.4 overall. Respondents in Range area firms were judged by interviewers to be somewhat more cooperative and more knowledgeable than respondents from Port Cities firms.

**Table 7**  
**Characteristics of Firms and Their Labor Force, for Range and Port Cities**  
**Northeast Minnesota Survey of All Firms, 2001<sup>49</sup>**

Items	Range	Port Cities	Overall <sup>50</sup>	sig <sup>51</sup>
Average number of full-time equivalent employees in the firm	15.7 (190) <sup>52</sup>	11.4 (106)	14.1 (295)	ns
Average percent of current employees who are union members	19.7 (190)	11.9 (105)	17.0% (295)	ns
Character of union-management relations among those with some union employees.				
Highly successful	17.0%	23.5%	18.8%	
Good working relationship	42.6	58.8	46.2	
Satisfactory relationship	38.3	0.0	28.6	sig
Poor relationship	2.1	0.0	1.4	
Combative relationship	<u>0.0</u>	<u>17.6</u>	<u>5.0</u>	
	100%	100%	100%	
	(47)	(17)	(65)	
Average number of job openings firms needed to fill in the past year (Oct 2000 to Oct 2001)	4.0 (189)	6.2 (104)	4.8 (293)	ns
Average number of employees expect to hire into listed critical jobs in the next 2-3 years (see Appendix B for a list of critical job needs)				
First critical job listed	1.1 (186)	3.6 (100)	2.0 (286)	sig
Second critical job listed	1.4 (156)	1.7 (81)	1.5 (238)	ns
Percent with concerns about the availability of a suitable labor force in the next 2-3 years. (See appendix A for a list of concerns)	27.5% (193)	29.5% (105)	28.0% (297)	ns
Percentage of firms that ship products/provide services outside Northeast Minnesota (or northwest Wisconsin for Douglas County firms)	25.5% (192)	24.8% (105)	25.3% (297)	ns
Size of firm				
Small (0 – 19 employees)	90.2%	86.8%	89.0%	
Medium (20 – 99 employees)	8.3	11.3	9.4	ns

<sup>49</sup> A random sample of 298 firms of all sizes of record in Northeast Minnesota and Douglas County, Wisconsin was stratified by firm size and county location. Telephone interviews were conducted with a knowledgeable official in each firm during October and November 2001 (after the September 11<sup>th</sup> New York tragedy). The overall response rate was ...

<sup>50</sup> The overall figures have been weighted to take account of the distribution of firm size across counties. This column is representative of all businesses.

<sup>51</sup> The chi square or ANOVA tests of significance of difference were used. Sig refers to differences between firm sizes that are statistically significant at the .05 level. Ns indicate that differences in the sample are not statistically significant.

<sup>52</sup> The number in parentheses is the number of firms on which the percentage or average is computed.

Large (100 or more employees)	<u>1.6</u> 100% (193)	<u>1.9</u> 100% (106)	<u>1.7</u> 100% (299)
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**Table 8**  
**Characteristics of Respondents, for Range and Port Cities**  
**Northeast Minnesota Survey of All Firms, 2001<sup>53</sup>**

Items	Range	Port Cities	Overall <sup>54</sup>	sig <sup>55</sup>
Average number of years respondent has lived in Northeast Minnesota (northwest Wisconsin for Douglas County firms)	30.4 (182) <sup>56</sup>	35.2 (105)	32.2 (287)	sig
Average number of years respondent has been with this business	11.8 (192)	13.6 (106)	12.4 (298)	ns
Interviewer rating of respondent cooperativeness				
Very cooperative	79.7%	76.4%	78.6%	
Somewhat cooperative	19.3	16.0	18.2	sig
Not very cooperative	<u>1.0</u>	<u>7.5</u>	<u>3.2</u>	
	100%	100%	100%	
	(192)	(106)	(298)	
Interviewer rating of respondent's level of knowledge				
Very knowledgeable	72.0%	64.2%	69.5%	
Somewhat knowledgeable	26.4	29.2	27.4	sig
Not very knowledgeable	<u>1.6</u>	<u>6.6</u>	<u>3.2</u>	
	100%	100%	100%	
	(193)	(106)	(298)	

<sup>53</sup> A random sample of 298 firms of all sizes of record in Northeast Minnesota and Douglas County, Wisconsin was stratified by firm size and county location. Telephone interviews were conducted with a knowledgeable official in each firm during October and November 2001 (after the September 11<sup>th</sup> New York tragedy). The overall response rate was ...

<sup>54</sup> The overall figures have been weighted to take account of the distribution of firm size across counties. This column is representative of all businesses.

<sup>55</sup> The chi square or ANOVA tests of significance of difference were used. Sig refers to differences between firm sizes that are statistically significant at the .05 level. Ns indicate that differences in the sample are not statistically significant.

<sup>56</sup> The number in parentheses is the number of firms on which the percentage or average is computed.

Respondents were asked about their future expectations for using employees in nine job categories. Table 9 contrasts the Range and Port Cities firms on these questions. There are statistically significant differences between these regions on expectations for using professional, executive, clerical and service occupations. Data from Table 9 have been reorganized into four panels in Table 9a to aid in making comparisons.

Only a small percentage of firms expect to use fewer employees in any of these categories. In almost all cases, Port City firms are slightly more likely to expect to use fewer employees in a given category. The main exceptions are for executive and machine operator categories where Range firms are more likely to use fewer.

Most firms both on the Range and in the Port Cities expect little or no changes in the use of employees in these categories (see panel b, Table 9a). Overall, 61% to 87% of firms expect no change. In general, firms located on the Range are more likely than Port Cities firms to report that they expect no change in the use of these categories of workers. Port Cities firms are especially *unlikely* to expect no change in the professional employee category (45.1% expecting no change vs. 78.1% for Range firms).

A higher percent of Port Cities firms expect to use more professional (46.1% vs. 20.8%), sales (21.2% vs. 16.5%), clerical (27.7% vs. 6.3%), machine operators (5.9% vs. 3.6%) and service occupations (22.1% vs. 7.3% for Range firms). Only for precision production and transportation employees do more Range firms expect greater usage than do Port Cities firms.

Panel d, Table 9a shows more Port Cities firms report *not* having professional (6.9% vs. 0.0%), executive (7.2% vs. 0.5%), clerical (6.9% vs. 4.7%), precision production (30.7% vs. 20.3%), machine operators (37.3% vs. 30.2%), transportation (31.1% vs. 22.9%), and service occupations (9.6% vs. 7.3%).



**Table 9**  
**Expected Change In Selected Employment Categories in Their Firm, for Range**  
**and Port Cities**  
**Northeast Minnesota Survey of All Firms, 2001<sup>57</sup>**

Items	Range	Port Cities	Overall <sup>58</sup>	sig <sup>59</sup>
Professional, paraprofessional and technical employees				
Expect to use fewer	1.0%	2.0%	1.5%	
Expect no change	78.1	45.1	66.6	sig
Expect to use more	20.8	46.1	29.6	
Do not have this type of employee	<u>0.0</u>	<u>6.9</u>	<u>2.3</u>	
	100%	100%	100%	
	(192) <sup>60</sup>	(102)	(294)	
Executive, administrator, manager employees				
Expect to use fewer	2.6%	1.0%	1.9%	sig
Expect no change	88.6	83.5	86.9	
Expect to use more	8.3	8.2	8.5	
Do not have this type of employee	<u>0.5</u>	<u>7.2</u>	<u>2.7</u>	
	100%	100%	100%	
	(193)	(97)	(290)	
Sales and related occupation employees				
Expect to use fewer	1.1%	3.8%	1.9%	
Expect no change	72.3	63.5	69.3	ns
Expect to use more	16.5	21.2	18.2	
Do not have this type of employee	<u>10.1</u>	<u>11.5</u>	<u>10.6</u>	
	100%	100%	100%	
	(188)	(104)	(293)	
Clerical and administrative employees				
Expect to use fewer	1.0%	1.0%	1.0%	
Expect no change	88.0	64.4	79.9	sig
Expect to use more	6.3	27.7	13.6	
Do not have this type of employee	<u>4.7</u>	<u>6.9</u>	<u>5.6</u>	
	100%	100%	100%	
	(192)	(101)	(293)	

<sup>57</sup> A random sample of 298 firms of all sizes of record in Northeast Minnesota and Douglas County, Wisconsin was stratified by firm size and county location. Telephone interviews were conducted with a knowledgeable official in each firm during October and November 2001 (after the September 11<sup>th</sup> New York tragedy). The overall response rate was ...

<sup>58</sup> The overall figures have been weighted to take account of the distribution of firm size across counties. This column is representative of all businesses.

<sup>59</sup> The chi square or ANOVA tests of significance of difference were used. Sig refers to differences between firm sizes that are statistically significant at the .05 level. Ns indicate that differences in the sample are not statistically significant.

<sup>60</sup> The number in parentheses is the number of firms on which the percentage or average is computed.

<i>Items</i>	<i>Range</i>	<i>Port Cities</i>	<i>Overall</i>	<i>sig</i>
Precision production, craft, repair employees				
Expect to use fewer	1.6%	3.0%	2.1%	
Expect no change	62.0	58.4	60.7	ns
Expect to use more	16.1	7.9	13.6	
Do not have this type of employee	<u>20.3</u>	<u>30.7</u>	<u>23.7</u>	
	100%	100%	100%	
	(192)	(101)	(293)	
Machine operators, assemblers, inspector employees				
Expect to use fewer	2.1%	1.0%	1.7%	
Expect no change	64.1	55.9	61.2	
Expect to use more	3.6	5.9	4.4	ns
Do not have this type of employee	<u>30.2</u>	<u>37.3</u>	<u>32.8</u>	
	100%	100%	100%	
	(192)	(102)	(293)	
Transportation, material moving employees				
Expect to use fewer	0.5%	2.9%	1.5%	
Expect no change	67.2	59.2	64.2	ns
Expect to use more	9.4	6.8	8.6	
Do not have this type of employee	<u>22.9</u>	<u>31.1</u>	<u>25.7</u>	
	100%	100%	100%	
	(192)	(103)	(296)	
Handlers, equipment cleaners, helpers, laborer employees				
Expect to use fewer	0.5%	2.9%	1.6%	
Expect no change	64.1	62.1	63.2	ns
Expect to use more	15.1	15.5	15.3	
Do not have this type of employee	<u>20.3</u>	<u>19.4</u>	<u>19.9</u>	
	100%	100%	100%	
	(192)	(103)	(296)	
Service occupations				
Expect to use fewer	1.0%	3.8%	1.9%	
Expect no change	84.5	64.4	77.6	sig
Expect to use more	7.3	22.1	12.5	
Do not have this type of employee	<u>7.3</u>	<u>9.6</u>	<u>8.1</u>	
	100%	100%	100%	
	(193)	(104)	(297)	

**Table 9a**  
**Expected Change In Selected Employment Categories in Their Firm, for Range**  
**and Port Cities, Northeast Minnesota Survey of All Firms, 2001<sup>61</sup>**

**a) Percent of firms who expect to use fewer**

<b>Items</b>	<b>Range</b>	<b>Port Cities</b>	<b>Overall<sup>62</sup></b>
Professional, paraprofessional and technical employees	1.0%	2.0%	1.5%
Executive, administrator, manager employees	2.6%	1.0%	1.9%
Sales and related occupation employees	1.1%	3.8%	1.9%
Clerical and administrative employees	1.0%	1.0%	1.0%
Precision production, craft, repair employees	1.6%	3.0%	2.1%
Machine operators, assemblers, inspector employees	2.1%	1.0%	1.7%
Transportation, material moving employees	0.5%	2.9%	1.5%
Handlers, equipment cleaners, helpers, laborer employees	0.5%	2.9%	1.6%
Service occupations	1.0%	3.8%	1.9%

**b) Percent of firms who expect no change**

<b>Items</b>	<b>Range</b>	<b>Port Cities</b>	<b>Overall</b>
Professional, paraprofessional and technical employees	78.1%	45.1%	66.6%
Executive, administrator, manager employees	88.6%	83.5%	86.9%
Sales and related occupation employees	72.3%	63.5%	69.3%
Clerical and administrative employees	88.0%	64.4%	79.9%
Precision production, craft, repair employees	62.0%	58.4%	60.7%
Machine operators, assemblers, inspector employees	64.1%	55.9%	61.2%
Transportation, material moving employees	67.2%	59.2%	64.2%
Handlers, equipment cleaners, helpers, laborer employees	64.1%	62.1%	63.2%
Service occupations	84.5%	64.4%	77.6%

**c) Percent of firms who expect to use more**

<b>Items</b>	<b>Range</b>	<b>Port Cities</b>	<b>Overall</b>
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<sup>61</sup> A random sample of 298 firms of all sizes of record in Northeast Minnesota and Douglas County, Wisconsin was stratified by firm size and county location. Telephone interviews were conducted with a knowledgeable official in each firm during October and November 2001 (after the September 11<sup>th</sup> New York tragedy). The overall response rate was ...

<sup>62</sup> The overall figures have been weighted to take account of the distribution of firm size across counties. This column is representative of all businesses.

Professional, paraprofessional and technical employees	20.8%	46.1%	29.6%
Executive, administrator, manager employees	8.3%	8.2%	8.5%
Sales and related occupation employees	16.5%	21.2%	18.2%
Clerical and administrative employees	6.3%	27.7%	13.6%
Precision production, craft, repair employees	16.1%	7.9%	13.6%
Machine operators, assemblers, inspector employees	3.6%	5.9%	4.4%
Transportation, material moving employees	9.4%	6.8%	8.6%
Handlers, equipment cleaners, helpers, laborer employees	15.1%	15.5%	15.3%
Service occupations	7.3%	22.1%	12.5%

#### d) Percent of firms who do not have this category of employee

Items	Range	Port Cities	Overall
Professional, paraprofessional and technical employees	0.0%	6.9%	2.3%
Executive, administrator, manager employees	0.5%	7.2%	2.7%
Sales and related occupation employees	10.1%	11.5%	10.6%
Clerical and administrative employees	4.7%	6.9%	5.6%
Precision production, craft, repair employees	20.3%	30.7%	23.7%
Machine operators, assemblers, inspector employees	30.2%	37.3%	32.8%
Transportation, material moving employees	22.9%	31.1%	25.7%
Handlers, equipment cleaners, helpers, laborer employees	20.3%	19.4%	19.9%
Service occupations	7.3%	9.6%	8.1%

Table 10 contrasts Range and Port Cities firms on various aspects of internet usage. Range firms are more likely than Port Cities firms to communicate with their customers by e-mail: 9.4% vs. 5.5%. Range firms also are more likely to expect an effect of the internet on their business within the next 2-3 years than are Port Cities firms (59.9% vs. 37.1% of Port Cities firms). A larger percentage of Range firms feel that their current labor force is equipped to face internet developments (83.4% vs. 74.8%). Among those who do not feel their labor force is equipped for the internet, Port Cities firms are more likely to want to train current workers (65.2% vs. 51.9% for the Range), and a larger percentage of Range firms expect to outsource this training (44.4% vs. 0.0% for Port Cities firms).

When asked about the availability of a suitable labor force over the next 2-3 years to fill their first and second-listed critical jobs, over half of Port Cities firms expected these workers would be available with effort while Range firms were more likely to say they were either readily available or probably not available. Forty-four percent of Range firms and 29% of Port

Cities firms felt workers for their first listed job would be readily available, figures that were approximately the same for the second listed critical job (see Appendix B for a listing of these jobs).

Table 11 provides information about selected business relationships of Range and Port Cities firms. Except for relationships with aviation firms in the region and with units in the University of Minnesota Duluth, Port Cities firms are more likely to have outside relationships. For example, 20% of Port Cities firms, but only 3% of Range firms report business relationships with firms in Thunder Bay (13% vs. 2% for Winnipeg), Canada. Two-thirds of Range firms and almost three-quarters of Port Cities firms have relationships with Twin Cities firms. A quarter of Range firms and a third of Port Cities firms have relationships with regional firms in the medical sector and less than 10% in each area have relationships with aviation firms in the region. Range firms are somewhat more likely to have relationships with units of the University of Minnesota Duluth (15.6% vs. 11.8% for Port Cities firms). Except for relationships with medical firms in the region, a somewhat higher percentage of Range and Port Cities firms expect to have relationships with these selected areas.

Finally, Port Cities and Range firms do not differ significantly in their assessment of the business climate for their firm. About 70% of firms see the business climate as good or excellent. About 20% see it as fair and a small fraction see it as poor or very poor. About a third report improvement in the last 2-3 years, most (45%) see little or no change, and about a fifth of the firms' report that the business climate has declined for their business. Comments on improvement and decline in the business climate are reported in Appendices A and B.

**Table 10**  
**Expected Effects of Internet on Their Firm, for Range and Port Cities**  
**Northeast Minnesota Survey of All Firms, 2001<sup>63</sup>**

Items	Range	Port Cities	Overall <sup>64</sup>	sig <sup>65</sup>
Average percentage of communications with customers that is by e-mail	9.4% (191) <sup>66</sup>	5.5% (105)	8.0% (296)	sig
Percent who expect that the internet will have an effect on their business in the next 2-3 years (see Appendix C for list of effects)	59.9% (187)	37.1% (105)	51.7% (291)	sig
Percent who feel the current labor force is equipped to face internet developments	83.4% (187)	74.8 (103)	80.4% (290)	sig
Main way their firm will gain work force internet skills among those who feel current labor force is not equipped to face internet developments				
Train current workers	51.9%	65.2%	57.1%	
Hire new workers	3.7	4.3	3.5	sig
Outsource	44.4	0.0	24.8	
Some other way	<u>0.0</u>	<u>30.4</u>	<u>14.5</u>	
	100%	100%	100%	
	(27)	(23)	(50)	
Availability of a suitable labor force in the next 2-3 years for the two most critical jobs in their firm (see Appendix B for a list of these jobs)				
First critical job listed				
Readily available	43.8%	29.1%	39.0%	
Available with effort	37.1	57.0	43.6	sig
Probably not available	<u>19.1</u>	<u>14.0</u>	<u>17.4</u>	
	100%	100%	100%	
	(178)	(86)	(264)	
Second critical job listed				
Readily available	40.0%	38.3%	39.4%	
Available with effort	43.2	55.6	47.5	sig
Probably not available	<u>16.8</u>	<u>6.2</u>	<u>13.1</u>	
	100%	100%	100%	
	(155)	(81)	(236)	

<sup>63</sup> A random sample of 298 firms of all sizes of record in Northeast Minnesota and Douglas County, Wisconsin was stratified by firm size and county location. Telephone interviews were conducted with a knowledgeable official in each firm during October and November 2001 (after the September 11<sup>th</sup> New York tragedy). The overall response rate was ...

<sup>64</sup> The overall figures have been weighted to take account of the distribution of firm size across counties. This column is representative of all businesses.

<sup>65</sup> The chi square or ANOVA tests of significance of difference were used. Sig refers to differences between firm sizes that are statistically significant at the .05 level. Ns indicate that differences in the sample are not statistically significant.

<sup>66</sup> The number in parentheses is the number of firms on which the percentage or average is computed.

**Table 11**  
**Business Relationships, for Range and Port Cities**  
**Northeast Minnesota Survey of All Firms, 2001<sup>67</sup>**

Items	Range	Port Cities	Overall <sup>68</sup>	sig <sup>69</sup>
Percent with <i>current business relationships</i> with firms in:				
Thunder Bay, Canada	2.8% (181) <sup>70</sup>	19.8% (106)	9.0% (286)	sig
Winnipeg, Canada	2.1% (191)	13.2% (106)	6.1% (296)	sig
Twin Cities	66.8% (193)	73.1% (104)	69.0% (297)	ns
Medical firms in Northeast Minnesota	25.5% (192)	33.0% (106)	28.0% (298)	ns
Aviation firms in Northeast Minnesota	9.1% (187)	7.6% (105)	8.8% (292)	ns
Units at the University of Minnesota	15.6% (192)	11.8% (102)	14.4% (294)	ns
Percent <i>expecting future business relationships</i> with firms in:				
Thunder Bay, Canada	6.3% (191)	20.2% (104)	10.9% (295)	sig
Winnipeg, Canada	5.8% (191)	16.3% (104)	9.4% (295)	sig
Twin Cities	71.2% (191)	67.3% (105)	69.9% (295)	ns
Medical firms in Northeast Minnesota	25.5% (192)	30.8% (104)	27.2% (296)	ns
Aviation firms in Northeast Minnesota	15.5% (187)	11.5% (104)	14.2% (291)	ns
Units at the University of Minnesota	25.3% (186)	21.8% (101)	23.8% (287)	ns

<sup>67</sup> A random sample of 298 firms of all sizes of record in Northeast Minnesota and Douglas County, Wisconsin was stratified by firm size and county location. Telephone interviews were conducted with a knowledgeable official in each firm during October and November 2001 (after the September 11<sup>th</sup> New York tragedy). The overall response rate was ...

<sup>68</sup> The overall figures have been weighted to take account of the distribution of firm size across counties. This column is representative of all businesses.

<sup>69</sup> The chi square or ANOVA tests of significance of difference were used. Sig refers to differences between firm sizes that are statistically significant at the .05 level. Ns indicates that differences in the sample are not statistically significant.

<sup>70</sup> The number in parentheses is the number of firms on which the percentage or average is computed.

**Table 12**  
**Assessment of the Business Climate for Their Business, for Range and Port Cities, Northeast Minnesota Survey of All Firms, 2001<sup>71</sup>**

Items	Range	Port Cities	Overall <sup>72</sup>	sig <sup>73</sup>
Rating of the business climate for their business in Northeast Minnesota (or northwest Wisconsin for Douglas County firms)				
Excellent	13.5%	20.0%	15.8%	
Good	55.1	53.3	54.5	
Fair	21.1	22.9	21.9	ns
Poor	9.7	3.8	7.3	
Very Poor	<u>0.5</u>	<u>0.0</u>	<u>0.5</u>	
	100%	100%	100%	
	(185) <sup>74</sup>	(105)	(290)	
Report of how the business climate has changed in the last 2-3 years for their business.				
Improved (see Appendix D)	36.6%	32.0%	34.9%	
Little or no change	44.8	44.7	44.7	ns
Declined (see Appendix E)	<u>18.6</u>	<u>23.3</u>	<u>20.4</u>	
	100%	100%	100%	
	(172)	(103)	(276)	

<sup>71</sup> A random sample of 298 firms of all sizes of record in Northeast Minnesota and Douglas County, Wisconsin was stratified by firm size and county location. Telephone interviews were conducted with a knowledgeable official in each firm during October and November 2001 (after the September 11<sup>th</sup> New York tragedy). The overall response rate was ...

<sup>72</sup> The overall figures have been weighted to take account of the distribution of firm size across counties. This column is representative of all businesses.

<sup>73</sup> The chi square or ANOVA tests of significance of difference were used. Sig refers to differences between firm sizes that are statistically significant at the .05 level. Ns indicates that differences in the sample are not statistically significant.

<sup>74</sup> The number in parentheses is the number of firms on which the percentage or average is computed.



## Appendices

- A. Most Important Concerns about Availability of Suitable Labor Force in the Next 2-3 Years
- B. List of Critical Jobs and Expected Employment
- C. List of Expected Effects of Internet on Their Business in the Next 2-3 Years
- D. List of Aspects of Business Climate that have Improved in Last 2-3 Years
- E. List of Aspects of Business Climate that have Declined in Last 2-3 Years

# Appendix A

## Most Important Concerns about Availability of a Suitable Labor Force in the Next 2-3 Years

### Small Sized Firms

- ✍ Kids are going to college and they won't want to work for our pay. We'll have a hard time finding people
- 1) Availability, I mean numbers in the skill area
- 2) quality of applications and work ethics
- 3) ability or desire to work, plenty of applicants but plenty that don't want to work
  
- ✍ Having properly trained funeral directors
- 1) Limited job force, more jobs than people available than people in community
- 2) limited amount of trained workers
- 3) low wages in this area
  
- 1) Shortage of suitable employees
- 2) the quality of or conscientiousness of an employee
- 3) shortage of housing for employees of any kind
  
- ✍ Availability of professional help
- ✍ Availability of experienced people, availability of licensed people, interested people in area, the availability of people who are interested
- ✍ Because I live in a very small community, finding part time workers. Young kids leaving the area that have been working for me
- ✍ Being able to find people to do this type of work
- ✍ Challenge to recruit in terms of salary. lack of public service, If we went back 10 years ago, it was easy to get employees to apply, because we could offer them more money
- ✍ Definite shortage of technicians. Not enough people to replace people leaving.
- ✍ Finding qualified workers who do a good job
- ✍ Finding quality qualified young men and women to go into law enforcement. There is no pool out there. This is a national problem. Just filling for retirements and new hiring
- ✍ Finding someone who is qualified to actually do the work
- ✍ I am concerned that people will leave the area because there are not any jobs. They will seek better pay and benefits elsewhere. Finding qualified people.
- ✍ I think we are having a difficult time filling technicians. There are few being trained. There are only 8 students per session. High drop out rates and it takes 2 years.
- ✍ No one wants to come to Duluth.
- ✍ It's hard to find honest people. It's hard to find trained people.
- ✍ Just finding somebody who is willing to be trained and stick with the job.
- ✍ Lack of qualifications. Lack of qualified personnel within the region specifically
- ✍ Obtaining people with field knowledge hiring at reasonable wages.
- ✍ Partly because we can only offer part-time and that's not enough for people applying. We need people with more skills and we need people with more experience in service occupations

- ✍ and technical occupations, map reading.
- ✍ Pay them sufficient salary. They're very well educated and I would have to say I have no other concerns.
- ✍ People that can work
- ✍ Population base is too small to sustain a labor force, lack of affordable housing for employees
- ✍ Potentially being able to take over the dental practice in order to continue taking care of present dental patients
- ✍ Reliable trainable employees
- ✍ Being able to attract employees to this region. Health care costs are a concern.
- ✍ The profits, employee expense over the return of the cost
- ✍ Shortage of hairdressers.
- ✍ The younger generation is not going into this field because they think there is no money here.
- ✍ We have difficulty attracting degreed, professional people to come to work.
- ✍ Medium Sized Firms
- ✍ Finding people for math, science and industrial tech 2) Potential population decline
- ✍ Numbers, just have the people out there to apply. There just isn't enough. 2) Just not having enough skills
- ✍ People wanting a higher starting salary than our union offers. The good people will get weeded out and go to other businesses
- ✍ That there is a lack out there or uninterested.
- ✍ We need trained financial workers who are familiar with state computer system 2) We need access to more trained social workers 3) Child support trained in using the
- ✍ State prison computer system
- ✍ Youth are leaving the area for metro to seek better jobs
- ✍ Ability to work evenings, work well with children.
- ✍ Adequately experienced clerical workers.
- ✍ Appropriate workers would be available.
- ✍ Attracting qualified candidates to come to our location.
- ✍ Because of the nature of the work, only 1 or 2 hours a day, hard to train the people to do this. They don't get enough hours. Housekeeping mostly.
- ✍ Concerned about quality employees available.
- ✍ Enough trained workers.
- ✍ Finding a lack of skilled labor available for this area. Housing costs are too high in the area for what we pay.
- ✍ Finding employees with basic work skills, attendance, medical costs, hospital coverage
- ✍ Finding male camp counselors
- ✍ Finding people that are appropriately trained, the competition with hospitals
- ✍ Finding qualified people.
- ✍ Finding skilled and motivated workers.
- ✍ Finding skilled workers
- ✍ Getting qualified people
- ✍ Having people to work up there, housing issues, nowhere to live. Summer employment hard to find
- ✍ If other businesses come in, the availability of high school and college age kids.
- ✍ Jobs have been open and not enough people who are willing to work, people who are capable of the job and with the market as good as it is people don't care about their work
- ✍ and can walk off there at any time
- ✍ Just sheer numbers won't be available; having a number of candidates apply is our concern.
- ✍ Lack of people wanting to do the work that we do, specifically drivers

- ✍ Limited amount of employees.
- ✍ Nobody wants to move up here.
- ✍ Not being able to find the workers that we need, retaining laborers.
- ✍ Number of people available. Ability of those people to perform in a technical environment. The effects of health care costs on the available work force. What we will have to
- ✍ pay for health care.
- ✍ People aren't out there.
- ✍ People with higher levels of safety certifications. Two, more skilled workers.
- ✍ Primarily skill level, the work ethic and dedication to the job.
- ✍ Qualifications, very concerned about work ethic of younger people coming
- ✍ Qualified employees, dedicated employees.
- ✍ Qualified workers
- ✍ Shortage of qualified individuals
- ✍ Simple supply of them
- ✍ Small labor pool so getting employees to work here is a challenge
- ✍ State licensing. State of MN is going to new licensing for chemical dependency counselors. Rising cost of labor, minimum wage
- ✍ Strictly number of available employees (spec) the number of eligible applicants very low and will be lower
- ✍ Supply, the shortage of supply. Finding good quality people
- ✍ That the unemployment rate in the area is low, housing for people who move up there to work, challenge that the employee will expect from the employer, having the employee
- ✍ feeling comfortable talking to the employer about problems
- ✍ That there's not one available
- ✍ The availability. The cost.
- ✍ The kids can't make change and speak English for fast food. When unemployment is up, we have no problem. When unemployment is down we do.
- ✍ The lack of interest in engineering, they all seem to be going into computers.
- ✍ The number of employees looking for jobs. Like shrinking employment. Two, less people that want to work. The young work ethic has gone to the toilet. Work ethics.
- ✍ Are terrible for young people due to the liberal society teaching them this.
- ✍ The unavailability of qualified people (other) no, that's the biggest concern, just getting people on staff that are qualified to be there
- ✍ Their ability to perform. The amount of people that want to work is reduced anytime there's a low employment there are no employees available. Availability of employees.
- ✍ There are no qualified people. Demand of people is so high that we won't be able to find people with the training that we need
- ✍ There doesn't seem to be a labor force
- ✍ There will be not enough skilled workers
- ✍ There would be enough of labor force to fulfill my needs.
- ✍ There's not going to be enough people in any level job if present need for service jobs () no that would be biggest issue
- ✍ Training technicians
- ✍ We are in a rural area and not many people
- ✍ We just don't have a pool of the skilled labor that we need

- ✍ Well, the unemployment rate is 3-5 %, when it was 8% I had no problem finding help. Now I cannot. My current workers are not very dependable. They go to jail or other things
- ✍ Where the labor force will drive costs as far as money spent recruiting. The availability of the workers with necessary skills

## Appendix A

### Most Important Concerns about Availability of a Suitable Labor Force in the Next 2-3 Years (continued)

#### Large Sized Firms

- 1) Can't get help (MS) as far as even basic things as showing up, especially the young people
- 2) showing up, being a quality person, and being neat for the general public,
- 3) customer-oriented person, has no idea what customer service is
- 1) lack of population
- 2) lack of housing in the area, affordable housing & even try to search elsewhere very little housing
- 3) high cost of property in cook county, it has sky rocketed& the jobs available couldn't support someone living in the city
- 1) Locating and retaining (ms) finding workers for job opening and retaining
- 1) Teachers, licensed teachers - not able to get those
- 2) available bus drivers
- 1) Shrinking workforce.
- 2) We have a number of employees retiring 3) high medical cost...it would be high for employees
- ✍ Already facing situation where availability is very limited. Our facility operates with open positions, reduces our capacity because of staff availability reasons and I'm concerned that we may see more of that
- ✍ Availability of qualified young people with good work ethic
- ✍ Being able to hire and retain qualified applicants and staff.
- ✍ Diminished supply of trained workers in area for medical-technical professions
- ✍ Don't have certified individuals available
- ✍ Education level will be too low of people. Things are getting more sophisticated.
- ✍ Finding employees Recruiting
- ✍ Finding experienced truck drivers
- ✍ Finding qualified engineering staff.
- ✍ Finding skilled kitchen help, and managerial-trained people, and more people to apply for maid positions
- ✍ Fully qualified, licensed teachers in special education, math and science, foreign languages. Problems with finding computer technicians
- ✍ Getting qualified applicants. They are few and far between.
- ✍ Getting them
- ✍ Hard to find people with experience in our industry. it is hard to find skilled people
- ✍ Harder and harder to find people, keep people, both skilled and unskilled workers
- ✍ I don't do the hiring, but I know it has been difficult to fill positions because of competition
- ✍ If we could pay people what they want
- ✍ Interest of the people in those fields.
- ✍ Just appropriate training in special areas. Special education especially

- ✍ Just being able to get a pool of candidates. Professional and faculty especially.
- ✍ Lack of skilled workers, people who want to stay and trained technical workers including radiological techs and resp. therapist and advanced practical nursing
- ✍ Low numbers of people, lack of qualified training,
- ✍ More employees that are computer literate & experts, team players & people that are trained very highly in technology. We need to change the way staff is doing things & training more current employees on skills they need. More involved within the school
- ✍ Most problems with are unskilled nonprofessional people in food service, assisted living and homemaker programs are only think ones in next 2-3 years
- ✍ My concern is that they won't be there. That there are too many jobs that they won't take this one.
- ✍ Not enough nurses there is a concern for not enough people going into the nursing profession high turnover. Difficult job to get people into and stay (probe) no
- ✍ Not enough people are going into training, availability of training programs; traditional classroom setting isn't going to be there anymore. We need to get of the old way of thinking in education
- ✍ Not enough people that want to work. Enough people apply, but no one wants to work
- ✍ Not enough workers (else) people not wanting to go into the medical field.
- ✍ Not getting qualified pipe fitters/welders
- ✍ Not having enough, maybe not enough of those who are willing to come to work every day to do the job ( ) no
- ✍ Number of availability and the number of qualified individuals, quality
- ✍ Our young people's work ethics
- ✍ People aren't available. People don't have the right qualifications. Lack of people in the medical field
- ✍ Population decline lack of cutting edge knowledge
- ✍ Qualified applicant, any applicant. Keeping employees
- ✍ Retaining and hiring them (nursing assistants)
- ✍ shortage of people in certain occupations (ANOTHER) no
- ✍ shortage of RN and licensed practical nurses. (Else) no
- ✍ skill for administrative position. qualified applicants for sales representatives
- ✍ skilled precision workers
- ✍ technical skills ( ) no
- ✍ that it's not going to be available again it's a shrinking labor force - the young people of the area are leaving ( ) no that's about it
- ✍ that there will be suitable labor (other) no
- ✍ That they have the right skills
- ✍ the availability for people to fill the position (MS) that they have the training
- ✍ the labor pool, the selections of individuals...the applications for jobs are getting fewer and fewer.
- ✍ there is a shortage of people that are willing and able. there are a limited number of people coming to our field and there is a lot of competition between other businesses for employees.
- ✍ We struggle now to get people in the nursing field, there is a shortage. Higher skilled areas. Nothing more
- ✍ well we don't have enough Nursing assistants, we have a hard time recruiting technical workers (ANOTHER) licensed nursing staff also (MS) getting them hired
- ✍ we're trying to expand out area with technology and in doing so also give our city more or less the means to supply trained workers in the technology area ( ) no

## Appendix B Critical Jobs and Expected Employment

### Small Sized Firms

<b>Critical Jobs In Their Business</b>	<b>Hiring</b>	<b>Availability</b>
The doctors.	0	Probably not avlble
Seamstress	0	Probably not avlble
problem solving	0	Probably not avlble
city administrator	0	Probably not avlble
fails	0	Probably not avlble
forester	0	Probably not avlble
loan officers	0	Probably not avlble
meat cutting	0	Probably not avlble
Installing	0	Probably not avlble
executive director	0	Probably not avlble
my job, the basic management at the lumber yard	0	Probably not avlble
marketers	0	Probably not avlble
executive director	0	Probably not avlble
Purchasing merchandise	0	Probably not avlble
consultant	0	Probably not avlble
processing	0	Probably not avlble
teller positions	0	Probably not avlble
Service	0	Probably not avlble
the education director	0	Probably not avlble
service technician	0	Probably not avlble
completion of status reports person	0	Probably not avlble
owner/manager	1	Probably not avlble
know how to lay out design and color setting	1	Probably not avlble
pharmacist	1	Probably not avlble
the managing part of it again	1	Probably not avlble
running the printing press	1	Probably not avlble
psychiatry	1	Probably not avlble
pharmacy	1	Probably not avlble
bartending	1	Probably not avlble
chef in kitchen	2	Probably not avlble
maintenance technicians	3	Probably not avlble
manager	0	Available w/effort
911 system management	0	Available w/effort
Management	0	Available w/effort
office sales	0	Available w/effort
Director of Department	0	Available w/effort
general operations manager	0	Available w/effort
marketing manager	0	Available w/effort
estimator	0	Available w/effort
customer relations	0	Available w/effort
the public speaking presenter	0	Available w/effort
public works supervisor	0	Available w/effort
mechanic	0	Available w/effort
broker	0	Available w/effort
administrator	0	Available w/effort
county surveyor	0	Available w/effort
funeral director/mortician	0	Available w/effort
partner	0	Available w/effort
manager	0	Available w/effort
claims administrator	0	Available w/effort
dental	0	Available w/effort
beautician/cosmetologist	0	Available w/effort
chair side dental asst	0	Available w/effort

administrative assistant	0	Available w/effort
administration	0	Available w/effort
Investigation to prosecute and take legal steps.	0	Available w/effort
emergency contingency planning	0	Available w/effort
Research and development	0	Available w/effort
properly assess damage, damage appraisal	0	Available w/effort
chief financial officer	0	Available w/effort
recycling center operator	0	Available w/effort
Exhaust repair person	0	Available w/effort
accountant	0	Available w/effort
bookkeeping	0	Available w/effort
office manager	0	Available w/effort
repair technician	0	Available w/effort
computer skills	0	Available w/effort
customer service	0	Available w/effort
clerk	0	Available w/effort
financial advisor	0	Available w/effort
secretary accountant	0	Available w/effort
911 technician	0	Available w/effort
recreation specialist	0	Available w/effort
loan officer	0	Available w/effort
sales	0	Available w/effort
the assistants	0	Available w/effort
program director	0	Available w/effort
financial director	0	Available w/effort
director	1	Available w/effort
Management	1	Available w/effort
Laborers	1	Available w/effort
licensed agents	1	Available w/effort
Inside sales	1	Available w/effort
contacting insurance and claimants promptly	1	Available w/effort
manager	1	Available w/effort
public relation	1	Available w/effort
hardwood floor installer	1	Available w/effort
teacher	1	Available w/effort
Sales	1	Available w/effort
dk(sym)county auditor (elected position)	1	Available w/effort
technician	1	Available w/effort
Computer operator	1	Available w/effort
patrol, everyday patrol	2	Available w/effort
Sales	2	Available w/effort
inventory	2	Available w/effort
customer service	2	Available w/effort
audiologist	2	Available w/effort
receptionists	2	Available w/effort
technical support	2	Available w/effort
computer skill-related jobs	2	Available w/effort
Order filling	2	Available w/effort
technicians	2	Available w/effort
installer of equipment	2	Available w/effort
installation	3	Available w/effort
sales person	3	Available w/effort
sales and service	3	Available w/effort
housing cleaning services rentals	3	Available w/effort
Mechanic	3	Available w/effort
forestry technician	3	Available w/effort
cashier	4	Available w/effort
cashiering	5	Available w/effort
county commissioner	5	Available w/effort
laborers	5	Available w/effort



health care	12	Available w/effort
recreation leader	20	Available w/effort
human services	20	Available w/effort
Manager	DK	Available w/effort
counter person	DK	Available w/effort
manager	0	Readily available
Brake job repair person	0	Readily available
nutrition coordinator	0	Readily available
drivers	0	Readily available
general manager	0	Readily available
maintenance	0	Readily available
business consultant	0	Readily available
attorney	0	Readily available
director	0	Readily available
clean kennels	0	Readily available
sales, telemarketing	0	Readily available
Operations manager	0	Readily available
branch librarian	0	Readily available
computer skills job	0	Readily available
research	0	Readily available
city clerk	0	Readily available
financial accountant	0	Readily available
office manager	0	Readily available
selling groceries	0	Readily available
legal assistant	0	Readily available
clerical support	0	Readily available
labor, maintenance	0	Readily available
Truck driver	0	Readily available
bartender	0	Readily available
executive housekeeper	0	Readily available
lawyer (with law degree) who handle real estate	1	Readily available
bartender	1	Readily available
mechanic	1	Readily available
customer service representatives	1	Readily available
project assistant	1	Readily available
personal injury lawyer	1	Readily available
Office employees	1	Readily available
customer service rep	1	Readily available
schedulers	1	Readily available
dispatcher	1	Readily available
office director	1	Readily available
library aid	1	Readily available
clerical receptionist	1	Readily available
owner	2	Readily available
sales associates	2	Readily available
Zamboni drivers	2	Readily available
researcher	2	Readily available
cleaning person	2	Readily available
management	2	Readily available
customer service	2	Readily available
human resource	2	Readily available
assembly	2	Readily available
customer relations	3	Readily available
people who can travel from one studio to another	3	Readily available
field clerk	3	Readily available
People who try to get kids to smile.	3	Readily available
sales personnel	3	Readily available
concrete coatings	3	Readily available
manager	4	Readily available
management	5	Readily available
field people in sales	10	Readily available

plant manager	30	Readily available
customer service employees	DK	Readily available
Buying	0	DK
journeyman electrician	0	DK
electrician	0	DK
operations manger	0	DK
consultant	0	DK
building manager	0	DK
manager	0	DK
heating and air conditioning technician	0	DK
marketing manager	0	DK
accountant	0	DK
manager's helper	0	DK
sales	1	DK
satisfying the client (only employee)	0	RA

## Medium Sized Firms

Critical Jobs In Their Firm	Hiring	Availability
news editor	0	Probably not avlble
owner	0	Probably not avlble
exec director	0	Probably not avlble
Sales	0	Probably not avlble
loan officers	0	Probably not avlble
sales	0	Probably not avlble
management	0	Probably not avlble
Teachers	1	Probably not avlble
Staff psychiatrist	1	Probably not avlble
firefighter paramedics	1	Probably not avlble
pre-press personnel	1	Probably not avlble
staff engineers	1	Probably not avlble
executive director	1	Probably not avlble
food service coordinator	2	Probably not avlble
Experienced chefs	2	Probably not avlble
front sales	2	Probably not avlble
physician	2	Probably not avlble
Home care aids	2	Probably not avlble
administration middle management	2	Probably not avlble
qualified techs	2	Probably not avlble
sales	2	Probably not avlble
merchandising	2	Probably not avlble
sales	2	Probably not avlble
homemakers	2	Probably not avlble
aluminum welders	3	Probably not avlble
financial worker	3	Probably not avlble
teachers	5	Probably not avlble
support personnel such as teaching assistants	6	Probably not avlble
labor	7	Probably not avlble
a guide	20	Probably not avlble
general crew	30	Probably not avlble
service employees	75	Probably not avlble
trail staff	75	Probably not avlble
servers	0	Available w/effort
quality assurance specialist	0	Available w/effort
Wood procurement	0	Available w/effort
account executive	0	Available w/effort
property managers	0	Available w/effort
Sales	0	Available w/effort

executive director	0	Available w/effort
financial officer	0	Available w/effort
administration	0	Available w/effort
classroom teacher	0	Available w/effort
engineering technician	0	Available w/effort
recreation staff	0	Available w/effort
bank lending officer	0	Available w/effort
ship loading superintendent	0	Available w/effort
management	0	Available w/effort
receptionist	0	Available w/effort
management	0	Available w/effort
meat cutters	0	Available w/effort
Chief Financial Human Resources officer	0	Available w/effort
lumber sales	0	Available w/effort
sales	0	Available w/effort
Management	0	Available w/effort
creative design	0	Available w/effort
program directors	0	Available w/effort
foreman	0	Available w/effort
bookkeeper/business manager	0	Available w/effort
foreman manufacturing concrete products	0	Available w/effort
physicians	0	Available w/effort
Administrative - Principal	0	Available w/effort
support staff	0	Available w/effort
nurses	0	Available w/effort
assistant head coach	0	Available w/effort
timber staff	0	Available w/effort
maintenance chief	0	Available w/effort
mechanic (MS) general mechanic	0	Available w/effort
management	0	Available w/effort
suppliers	0	Available w/effort
deputy director	0	Available w/effort
sales	0	Available w/effort
night manager job	0	Available w/effort
President of the college	0	Available w/effort
Superintendent.	1	Available w/effort
truck driver	1	Available w/effort
management	1	Available w/effort
cooks	1	Available w/effort
technology support	1	Available w/effort
cooks	1	Available w/effort
sales people	1	Available w/effort
chef	1	Available w/effort
administrator	1	Available w/effort
A facility manager	1	Available w/effort
Case manager	1	Available w/effort
sales	1	Available w/effort
truck driving	1	Available w/effort
Drivers	1	Available w/effort
preparation, people that get everything ready	1	Available w/effort
regulatory compliance officer	1	Available w/effort
sales people	1	Available w/effort
customer service	1	Available w/effort
food and beverage manager	1	Available w/effort
teacher	1	Available w/effort
order entry personnel	2	Available w/effort
press operator	2	Available w/effort
customer relations	2	Available w/effort
medical	2	Available w/effort
Sales and marketing position	2	Available w/effort
estimators	2	Available w/effort

welders	2	Available w/effort
lab component processors	2	Available w/effort
operations management	2	Available w/effort
clerical services	2	Available w/effort
clinical assistant	2	Available w/effort
I would say, well, it's a lot of teamwork in this area,		
one of the marketing positions	3	Available w/effort
social worker	3	Available w/effort
meat cutter	3	Available w/effort
Mechanics, heavy machinery	3	Available w/effort
shift managers	3	Available w/effort
administrative	3	Available w/effort
teachers	4	Available w/effort
highway construction supervisor	4	Available w/effort
management	4	Available w/effort
shift leader	4	Available w/effort
Laborers	4	Available w/effort
sewing production	5	Available w/effort
Management	5	Available w/effort
service	5	Available w/effort
servers	5	Available w/effort
installers	5	Available w/effort
sales	5	Available w/effort
clerks	5	Available w/effort
school administrators	6	Available w/effort
Team Leaders	6	Available w/effort
fire fighters	6	Available w/effort
skilled production worker	6	Available w/effort
social worker	7	Available w/effort
teacher	7	Available w/effort
collection staff, has direct contact with donors,		
perform donor interview, draw blood	8	Available w/effort
all important. well, our engineer technicians	8	Available w/effort
roofers	10	Available w/effort
teaching	10	Available w/effort
canoe guides	10	Available w/effort
customer service	15	Available w/effort
line cooks	20	Available w/effort
Crew employees	25	Available w/effort
closing positions, working late nights—		
not a certain job, just certain times	40	Available w/effort
telemarketer	200	Available w/effort
Management	DK	Available w/effort
natural resource planning positions	0	Readily available
executive director	0	Readily available
technical support	0	Readily available
teacher	0	Readily available
jail administrator	0	Readily available
engineering	0	Readily available
police officer	0	Readily available
snow plow truck drivers	0	Readily available
dishwashers	0	Readily available
layout	0	Readily available
Dispatcher	0	Readily available
clerical administrative support	0	Readily available
chief deputy	0	Readily available
accounting	0	Readily available
Street commissioner	0	Readily available
buyers	0	Readily available
mechanics	0	Readily available

dispatchers	0	Readily available
administration	0	Readily available
front desk clerk	1	Readily available
firefighter	1	Readily available
deputies	1	Readily available
secretarial pool	1	Readily available
grain inspector	1	Readily available
Administrator	1	Readily available
equipment operator	1	Readily available
administrator of the building	1	Readily available
food service	1	Readily available
managers	2	Readily available
Dispatcher	2	Readily available
teller position	2	Readily available
sales associate	2	Readily available
service representative	3	Readily available
management	3	Readily available
skilled crafts	5	Readily available
teachers	5	Readily available
accountant	5	Readily available
maintenance	6	Readily available
room attendant	7	Readily available
labor technician	10	Readily available
customer service	12	Readily available
Greeting people at the door	20	Readily available
Cooking	20	Readily available
communication with customers	25	Readily available
cooks	25	Readily available
Security	40	Readily available
servers	60	Readily available
sales	DK	Readily available
teachers	DK	Readily available
Drivers	DK	Readily available
sports staff (MS) (aides, drivers, cooks)	DK	Readily available
cook	4	DK
the team of supporters of vendor	DK	DK
We're in a highly regulated industry and everyone is important		
Difficult to place only one position, team management effort		
They are equally important; one can't do without the other		

## Large Firms

Critical Jobs In Their Firm	Hiring	Availability
advertising	0	Probably not avlble
computer information specialist	0	Probably not avlble
administrator	0	Probably not avlble
Journalists	0	Probably not avlble
Operations management	0	Probably not avlble
financial management	0	Probably not avlble
Plant manager	0	Probably not avlble
controller	0	Probably not avlble
manager	0	Probably not avlble
bookkeeping	0	Probably not avlble
administration	0	Probably not avlble
sales, the person in charge of selling the equipment	0	Probably not avlble
sales	1	Probably not avlble
chef	1	Probably not avlble
engineering	1	Probably not avlble
lab technicians	2	Probably not avlble

water plant operator	2	Probably not avlble
engineer	3	Probably not avlble
information services specialist	4	Probably not avlble
nurses	5	Probably not avlble
nursing assistants	6	Probably not avlble
Physicians	8	Probably not avlble
Nurses	10	Probably not avlble
Medical Specialist	10	Probably not avlble
support staff, like housekeeping	10	Probably not avlble
welder	10	Probably not avlble
pipe fitters	12	Probably not avlble
nursing assistant	15	Probably not avlble
Faculty	20	Probably not avlble
nursing assistant	20	Probably not avlble
nursing assistants	50	Probably not avlble
truck drivers	50	Probably not avlble
dining room server	70	Probably not avlble
supervision in manufacturing	0	Available w/effort
General manager	0	Available w/effort
store manager	0	Available w/effort
customer service	0	Available w/effort
management	0	Available w/effort
Pattern production managers	0	Available w/effort
CEO	0	Available w/effort
chief financial person	0	Available w/effort
Superintendent	0	Available w/effort
the administrator	0	Available w/effort
Operations manager	0	Available w/effort
Maintenance manager	0	Available w/effort
VP of operations	0	Available w/effort
systems analyst	0	Available w/effort
administrators	0	Available w/effort
Maintenance superintendent	0	Available w/effort
Business manager	0	Available w/effort
Office Administrator	1	Available w/effort
the RNs	1	Available w/effort
teaching	1	Available w/effort
manager	1	Available w/effort
case manager	1	Available w/effort
operations managers	1	Available w/effort
estimating	1	Available w/effort
computer technicians	1	Available w/effort
marketing	1	Available w/effort
mechanic	1	Available w/effort
individual store managers	2	Available w/effort
Nurse	2	Available w/effort
teachers	2	Available w/effort
sales department	2	Available w/effort
nurses	2	Available w/effort
student services area, counselor to advisors	2	Available w/effort
tie between x-ray tech and medical lab tech	2	Available w/effort
management positions, new business development	2	Available w/effort
electronic prepress	2	Available w/effort
sales manager	3	Available w/effort
electric lineman	3	Available w/effort
treatment team manager	3	Available w/effort
IT people	3	Available w/effort
bus drivers	3	Available w/effort
nurses	3	Available w/effort
licensed practical nurse	3	Available w/effort

registered nurses	5	Available w/effort
machinist	5	Available w/effort
Registered nurse	5	Available w/effort
supervising that same effort	5	Available w/effort
Stock replenishment	5	Available w/effort
licensed practical nurse	5	Available w/effort
supervisor	5	Available w/effort
teachers	7	Available w/effort
teachers	10	Available w/effort
physician	10	Available w/effort
clerical support	10	Available w/effort
staff nurse or RN	10	Available w/effort
customer service associate	10	Available w/effort
nursing assistants	15	Available w/effort
truck drivers	15	Available w/effort
management	15	Available w/effort
social workers	17	Available w/effort
Nursing staff	20	Available w/effort
customer service employees	20	Available w/effort
nurses	20	Available w/effort
Nursing Assistant	20	Available w/effort
nursing assistant	25	Available w/effort
nursing	30	Available w/effort
sales positions	30	Available w/effort
Registered Nurse	30	Available w/effort
customer service associate	40	Available w/effort
nursing	40	Available w/effort
youth treatment specialist	45	Available w/effort
nursing assistants	50	Available w/effort
sales associate	50	Available w/effort
Qualified nurses	50	Available w/effort
nursing assistant	50	Available w/effort
housekeeper	60	Available w/effort
nursing	100	Available w/effort
Nursing assistant	100	Available w/effort
sales reps	150	Available w/effort
Engineers and architects	DK	Available w/effort
press operator	DK	Available w/effort
Architect	DK	Available w/effort
customer service rep.	RA	Available w/effort
managerial	RA	Available w/effort
mill manager	0	Readily available
assemblers	0	Readily available
refinery manager	0	Readily available
crane operators	0	Readily available
teachers	0	Readily available
inventory/production/planning/ transportation/logistics	0	Readily available
the marketing and sales manager	0	Readily available
financial people	0	Readily available
city engineer	0	Readily available
sales	0	Readily available
clerical staff	0	Readily available
support staff	0	Readily available
operations manager	0	Readily available
civil engineers	2	Readily available
production workers	2	Readily available
All are equally important	3	Readily available
engineering specialists	3	Readily available
instructors	4	Readily available
server	5	Readily available

machine operators	5	Readily available
telephone order clerks	5	Readily available
general professional student personal & service workers	5	Readily available
Nursing assistant	5	Readily available
faculty	10	Readily available
maintenance	10	Readily available
law enforcement	12	Readily available
machine operators (welding)	30	Readily available
nursing assistants	45	Readily available
customer service people/check-out operators	50	Readily available
service associate	100	Readily available
production workers	150	Readily available
teachers	2	DK
health care professionals	25	DK
Don't feel comfortable picking just two		
Hard to distinguish one job over another		

## Appendix C

### Expected Effects of Internet on Business in the Next 2-3 Years

#### Small Firms

- ✍ Well, it should increase business
- ✍ Advertising as far as a funeral home getting your story out and information about the funeral home onto the net
- ✍ As a source of advertising, I would expect it would generate more business
- ✍ Bring in more business, more awareness
- ✍ Effects will be minor, people will be marketing product over internet
- ✍ For product purchasing, more of it
- ✍ Gathering information from outside sources
- ✍ Reach more customers worldwide, and buyers
- ✍ Help wise
- ✍ Hopefully increase the business, I'm going on the internet to set up a web page
- ✍ Hopefully increased sales
- ✍ I don't know. I would think less business
- ✍ I expect it to be more time consuming, intrusive. Everything, reports and so on from insurance partners, are on internet. I am forced to fool around on the internet to get these.
- ✍ Someone will have to use it instead of calling.
- ✍ I think it will be a great resource, with training
- ✍ I think it will be used in information gathering and maybe some other. email obviously, mainly information gathering
- ✍ I think it will expand markets in general. Allow and encourage more sales to a broader market. International market rather than national.
- ✍ I think it will increase communications, more teleconferencing with cameras instead of over the phone. We'll probably have more info and stats available on the internet
- ✍ about forestry management
- ✍ If I had a website, I could attract more customers because it is just like advertising.
- ✍ Improve
- ✍ Improve communication between suppliers and customers.



- ✍ In our case we rent movies. It could affect us in the fact that videos would be available over the internet.
- ✍ Increase competition
- ✍ Increase in customer base, and people will walk in with a better knowledge of what they're looking for
- ✍ Increase in usage
- ✍ Increase sales by greater exposure
- ✍ Increase sales by increasing visibility
- ✍ Increase sales through websites and finding out customer information
- ✍ Increased usage, recruitment
- ✍ Increased advertising through internet
- ✍ Increased sales
- ✍ Information technology and how I receive it and how I process it
- ✍ It can be used more as a tool where we can guide people to our services
- ✍ It could increase my business, I'm just not set up for it yet, that's all through email
- ✍ It will allow us to serve more people with the same resources
- ✍ It will assist us in finding information that we need, maybe a tiny bit of advertising
- ✍ It will supplement the people we have that hopefully we won't lose any people by technology, but it will enhance our service
- ✍ It would increase our advertising capabilities
- ✍ It'll make it better. Just greater usage, reaching more people
- ✍ Just making people aware of what we have
- ✍ Less processing for us. Since (9/11) 171 million dollars in losses
- ✍ Make it better and more sales, more business transactions
- ✍ Make it easier to do business
- ✍ More easily accessible for clients
- ✍ More sales
- ✍ Name recognition. Developing programs to have a select list that you can pick us by our location
- ✍ Negative. I think there is going to be a lot less business in the next two to three years
- ✍ Negative effect because retail products can't sell at price that the internet is selling a. Can't inventory at scale and compete with what they have on the internet
- ✍ Not really big, a few more sales over the internet
- ✍ Our clientele will be more informed because they do research on products before they come in
- ✍ Our operations have gone online---people are using it more. The younger people use it more
- ✍ Probably more contact and confirming
- ✍ Products and services will be a lot more readily available to consumers, have to be more competitive
- ✍ Sell more disks, the pictures will come on disks, we'll sell more of those
- ✍ The ability to disseminate information out to customers or them to come out and get what is going on
- ✍ To make people more aware of the service
- ✍ We are a tourist destination. More and more people are becoming aware of it over the internet.
- ✍ We will be providing more info to people online. People will be able to apply for permits, job applications online
- ✍ We will probably be sending more reports and photographs to companies by email and internet

## Medium Size Firms

- ✍ More email ordering
- ✍ Access to more customers
- ✍ Advertising, informational
- ✍ As far as advertising, more people would see it and use our products
- ✍ Be able to get a website structured enough to get more info out to the customers and employees so they know what we are about
- ✍ Better exposure.
- ✍ Better opportunities of communication
- ✍ Bigger companies and commercial state institutions will be ordering product over the internet
- ✍ Communication
- ✍ Education institutions will increase enrollment through online courses
- ✍ Enhanced communication
- ✍ Envision a decline of subscriptions or unless start charging people for dialing into our website
- ✍ Faster and easier communication for customers.
- ✍ Increase access to research-based information
- ✍ How we communicate information. We're getting into it more and more.
- ✍ I expect it to dramatically affect the way we sell. There will be a growing purchaser user movement. Will get our name out there more
- ✍ I expect that we'll have more business because of the internet
- ✍ I think it will maybe make us more efficient by utilizing it more with ordering materials and supplies and making our inner communications to run our business more efficient
- ✍ I think students will take classes on the internet and less in the school and more teachers will teach online.
- ✍ I think we will use the internet to a greater degree. I think we will use the internet more for communications
- ✍ Incoming business growth - and the internet would have a large impact on that
- ✍ Increase awareness of our services
- ✍ Increase business
- ✍ It will help with promotion and advertising
- ✍ It will make communication easier
- ✍ Lose business
- ✍ Losing sales.
- ✍ May get complaints; help to communicate better in that respect.
- ✍ Moderate change until it gets going. Touching base with a wider range of people
- ✍ More awareness
- ✍ More business
- ✍ More clients can sell their product over the internet, so don't need the services of their telemarketing
- ✍ More communicating with customers through the internet
- ✍ More competition, information
- ✍ More efficient marketing
- ✍ More exposure
- ✍ More exposure to people about homeowners to our products
- ✍ Increase in sales
- ✍ More overseas business on the internet

- ✍ More people use the internet to explore more options of vacations
- ✍ More reservations made over the internet
- ✍ Mostly to improve communication and data transfer
- ✍ Negative effect
- ✍ No impact
- ✍ Ordering more things through it
- ✍ Our billing will be online and we'll do global bids over the internet, global purchasing groups
- ✍ Our website has a link to many other major websites; I think that it will bring in more golfers
- ✍ People will be contacting us more over the internet
- ✍ People would be shopping over internet without coming physically into stores out of corporate office, don't have to leave homes, buy from company, not stores
- ✍ Positive and reduce costs. We need to educate them better and hopefully in two years they will have internet access and save us the cost of mailing things out to them
- ✍ Positive changes, ordering will be done through internet
- ✍ Probably going to have to get a website to do more business by e-mail, for employee newsletters, that kind of thing
- ✍ Probably manuals online more and systems will be quicker
- ✍ Probably provide or let people know we are a national park and just the different services we offer, and that we are available to them.
- ✍ Raise the business. Get more products via suppliers over the internet
- ✍ Recruitment of employees.
- ✍ Redistributing the work load from one department to another
- ✍ The internet to have positive effect on our financial institution. We pretty much design a one stop shop internet banking
- ✍ The usage between our business, ordering more products between the 3 stores right now
- ✍ There's going to be more use of it through business
- ✍ To be honest we've gone to new system this year and it's been nothing but a headache all year long; it doesn't work at this time. it isn't a secure way of communicating
- ✍ so I don't know what the effect will be
- ✍ To get our message out there; more and more use of email
- ✍ Viruses hooked to the internet and they are causing problems for the business
- ✍ Visibility, more exposure to whoever is searching the net
- ✍ We actually get the jobs off the internet (search the internet to get the job)
- ✍ We are doing some highway projects. Coming into the 21st century. purchasing will improve the speed and efficiency
- ✍ We are going to be implementing more websites, creating website for clients and putting them on the website
- ✍ We don't buy anymore, everyone working over the internet, deals happen over the internet
- ✍ We use it as resource, education, access to medical journals, materials
- ✍ We will be doing more business with customers over the internet, consumer transactions, deposits, payments, bill payments, applying for loans
- ✍ We will have a web page and we'll be more accessible
- ✍ We will have to get a web page
- ✍ We would like to set up a website
- ✍ Well, as far as teaching...increase resources for students and teachers
- ✍ You're going to see more home deliveries and more shipping outside of our current city

## Large Firms

- ✍ Better access from buyers to services
- ✍ Better communication with parents, better communication within our system of schools
- ✍ Change the way we communicate with customers
- ✍ Communications with other organizations.
- ✍ Continue serving info and communication, enhancing global marketing
- ✍ Continue to play a larger role in communications with customers.
- ✍ Continues to provide a quicker and greater access to information for our employees. Increasingly allows the public to obtain information about us easier and improve
- ✍ customer service hopefully
- ✍ Creating more efficiency
- ✍ Direct competition. Instruction will be provided via the internet
- ✍ Expanding client base, to reach potential, sales representatives would be doing this
- ✍ Going to help us, make us more efficient
- ✍ Has affected teaching - use in most classes
- ✍ Hopefully some expansion in technology. we're trying to start a technology center
- ✍ I think we will have more reliance on it in our business to do reporting to meet the different laws and regulations, more ordering supplies over the internet, also more
- ✍ communications and reporting.
- ✍ I would say more advertising. Where customers go to it for more information about us, Communication...more and better communication through email
- ✍ In general I expect we'll be having more of our referrals, more info requests, be using internet more for recruitment for staff. I expect we'll be using internet more when it
- ✍ comes to ordering supplies and purchasing
- ✍ Increase enrollment, which is like sales
- ✍ Increase in sales and profitability
- ✍ Increase in sales due to pre-purchased tickets that we sell
- ✍ Increase operational efficiency by more interaction with customers
- ✍ Increase sales
- ✍ It is going to impact us positively and negatively. I don't want to go in depth
- ✍ It should speed up communications. Allow us to conduct our business in a more efficient manner and reach more people.
- ✍ It will give us more exposure to the products we currently make. It will help with sales
- ✍ It will improve ability to market to larger audiences
- ✍ It will increase the productivity of employees; we'll be able to handle more work - we'll have more employees but we'll be able to handle it with fewer than we have now
- ✍ It will make it more productive and easier
- ✍ It will provide more access to our consumers for our services
- ✍ Let people know of the services and the availability of the services offered here
- ✍ Marketing tool and probably increase competition
- ✍ More and more things are online, to access we have to go online.
- ✍ More external contact, human resources use to find personnel and use for internal research

- ✍ More involvement with web site and emailing
- ✍ More of our business will be handled via the internet
- ✍ More reporting over the internet, state reporting.
- ✍ Online registration, course work online, recruiting online (staff and students), purchasing online
- ✍ Positive, more business
- ✍ Probably mostly in getting supplies and hiring process
- ✍ Project management on internet
- ✍ Really don't know what to expect, I just know it will
- ✍ Recruiting tool- employment opportunities as well as info for patients
- ✍ Slight change in communication with suppliers
- ✍ The state is doing more and more business through internet.
- ✍ Ultimately increase sales.
- ✍ Very little. It will speed up certain items, like certain vessels (Shipyard) that can be reached.
- ✍ We have an online store and the store is taking off very well, we expect it to keep on going
- ✍ We have multiple branches. I will affect communication purposes
- ✍ We'll be using it more for customer relations
- ✍ We'll have more internet banking, so more customers
- ✍ We'll have more sales through internet
- ✍ Will give us more information on things quicker, it would make us give a better service

## Appendix D

### Aspects of Business Climate that Respondents Report to Have Improved in Last 2-3 Years

#### Small Firms

- ✍ More tourists
- ✍ The diversification of jobs would explain it more
- ✍ Area has grown as tourism destination
- ✍ Better education, more people coming in asking questions about education, better understanding by the public of what we do
- ✍ Better job marketing in region
- ✍ Business has expanded product line
- ✍ Changed because there is more need for the services of the company
- ✍ Don't know. More usage
- ✍ General economy has improved
- ✍ I changed my firm since I bought it three seasons ago and re-did the place
- ✍ I have gotten busier because there are more people up here now
- ✍ I think it was the checks people got back from federal and state.
- ✍ Increased revenue, more customers
- ✍ It is so hard to do a business survey of a public service operation, it's gotten better, the government has gotten better at giving
- ✍ investments in child recreation

- ✍ I've only been in business for two years, so it's only gotten better
- ✍ Just say more sales and there is a term for public acceptance
- ✍ More business. Bottom line is up.
- ✍ More help from people in the region
- ✍ More jobs out there. People are opening business more helpful to people. More help available to public.
- ✍ More needy people and more customers
- ✍ More of it
- ✍ More tourism
- ✍ My clients are busier so I'm busier
- ✍ Non-profit organization, increase in participants
- ✍ Not really sure...better run business
- ✍ Not sure why it's like that, there's lots of things, the bombings in Sept hurt a lot
- ✍ Population increased, it has increased the business
- ✍ Defining it is hard; there is more demand for services. So far we have less money to meet this increasing demand.
- ✍ Sales and labor are up more so in the last year
- ✍ Sales are up
- ✍ The demand for the service
- ✍ Well I guess we are only three years old. Developing more clientele
- ✍ We're doing more meat cutting
- ✍ We're getting more business because we are better established and provide a good service
- ✍ We're seeing a lot of business start up and seeing a lot of new people move into the community

## Medium Size Firms

- ✍ Awareness for the need for blood, increased number of people donating
- ✍ Busier, unfortunately.
- ✍ Clientele, increased
- ✍ Cooperation I would say initiative just positive attitude and outlook
- ✍ EMS, emergency medical services
- ✍ Enrollment, financial ability
- ✍ Growth
- ✍ I don't think it's really changed. More people coming up here. this area is being discovered, is busier but it's still the same. What we have to offer here hasn't changed.
- ✍ I'm a MN resident in a Wisconsin business so the business is taxed in WI and is slowed in MN tax breaks are different, so that's been detrimental
- ✍ Increase commercial industrial work
- ✍ Increase marketing of tourism and greater exposure of our business
- ✍ It has diversified, and residential programs have expanded and other components of the agency
- ✍ Management new and improved which made business better
- ✍ More and more people are coming to this area. our population is increased
- ✍ More business
- ✍ More rounds of golf, increased number of consumers
- ✍ More support for human services with our governing board and the economy

- ✍ More tourism, more tourism equals more sales
- ✍ More work over the last few years, more projects
- ✍ New stores and new companies moving into town, a lot of growth
- ✍ Number of students attending classes, and diversity of families attending classes
- ✍ Offering a better product. The last two years we were purchased in summer of '99 and we went from our line to their line and we are now a subsidiary so we have more buying power
- ✍ Our town is more stable with the mining company running full speed, made up recently
- ✍ Product availability for us
- ✍ Quality of customers
- ✍ Related demand for business has gotten stronger which makes our business stronger. Ex. the price of cattle has increased so they have more money to purchase our products.
- ✍ The amount of people that come by the business has increased because of other businesses in the area
- ✍ There are more employees. More quality I would say that
- ✍ We do a lot of recruiting, so the number of eligible applicants.
- ✍ We have a little less competition and people are returning to sewing and crafts. We're seeing more of that, doing well.
- ✍ We've had a decrease in workers compensation, which helped.

## Large Firms

- ✍ Our changes helped us improve our guests and our employees themselves take better care of guests
- ✍ A more positive attitude and additional businesses coming into the region.
- ✍ Development phase of business - startup business
- ✍ Financial, we've improved and need for our service has increased
- ✍ Getting employees has been a challenge but no longer is. With all of the layoffs we are finding more qualified employees.
- ✍ Growth
- ✍ I'd say sales wise we've had more profit
- ✍ Improved technology, improved knowledge of technology uses, increases business acumen
- ✍ Increased needs in the community for our services.
- ✍ Increased volume
- ✍ Just merged another medical facility
- ✍ Morale and community support
- ✍ more students more employees
- ✍ Our sales have increased. We have a lot of new equipment and working on an expansion which has given us more available to
- ✍ customers and clients
- ✍ Overall sales volume and number of employees and culture of company
- ✍ Quite a few new businesses have opened provide more jobs bringing more people to the area
- ✍ Safety, ergonomically people are able to work in an environment which is safe for them
- ✍ Sales, we've increased business
- ✍ Student enrollment increase
- ✍ Technology
- ✍ The tourist segment is large here and it seems to continue to grow

- ✍ There is an increased trust level and improved morale
- ✍ There's more diversity. I think there is variety in the types of jobs. Transition from some more traditional kinds of employment
- ✍ We have more manufacturing factories that have moved to northwestern Wisconsin...we have expanded

## Appendix E

### Aspects of the Business Climate That Respondents Report To Have Declined in the Last 2-3 Years

#### Small Firms

- ✍ Being able to sell ice time. More arenas = less business
- ✍ Changes in travel patterns affect our business, more shorter trips than long ones
- ✍ Customers, fall off of customers
- ✍ Demand for product. We're in the shipping business. The demand for shipping has declined substantially
- ✍ Less business
- ✍ More government control from every kind of regulation to employee's right to know to OSHA standards. Lots of regulations, the electronic filing and all the paperwork for small businesses
- ✍ Our business is weather dependent, if we have mild winters, we have less business
- ✍ Population has gone down bring decline
- ✍ Small Firms
- ✍ The economy. Mine closing and other stuff going on in world made it a lot tougher
- ✍ The government intervention, taxes the rules and regulations the climate that the government has created. Paperwork has increased because of this.
- ✍ The income, the money coming in has decreased
- ✍ The market, the area market
- ✍ The paper industry slowdown
- ✍ The revenue and numbers of people going down who visit our area.
- ✍ Tourism is down
- ✍ Volume as far as customers
- ✍ We are competing with other early childhood programs. The changes in the welfare program. Our program used to be the only program that was there, now there are others
- ✍ We have increased levy limits that restrict our budget. We have increased difficulty working with other parts of government

#### Medium Size Firms

- ✍ A lot of things have changed, the number of people coming here has declined and there is more competition, more businesses.
- ✍ All the new restaurants in town. Spreads customers pretty thin
- ✍ Basically just our sales I think have gone down, as far as it's really only declined since about Sept 11; it was steady until then. maybe consumer confidence.
- ✍ Budget dollars, client budget dollars
- ✍ Business has declined since bombings (else) no



- ✍ Businesses advertising
- ✍ Businesses are closing because of competition from other countries (e.g. (Brazil)
- ✍ Competition, there's a lot of competition
- ✍ Consumer spending has declined, we've experienced a decline in population and it is aging
- ✍ Decreasing in funding
- ✍ Decreasing population and decreasing economy
- ✍ I guess lack of qualified candidates for positions
- ✍ Employment is down. Mines shutting down
- ✍ Had to make personnel cuts, let people go
- ✍ Margins, employment, and competition has gotten tougher
- ✍ More competitors now
- ✍ People spend less money
- ✍ Population decline
- ✍ Population has dropped. Don't have as much business as used to
- ✍ Reducing clientele. This is the bar business, people don't like to go over the bridge anymore
- ✍ Slowed down for steel industry
- ✍ The amount of projects out there have declined
- ✍ The amount of revenue coming in. It has declined.
- ✍ The business has slowed down, the building business
- ✍ The mines are shut down, road construction, the bombing in New York has lowered business
- ✍ The pricing for products
- ✍ We got a new casino, there's more competition
- ✍ We have more unemployment and we find that we are losing business. If we have unemployment then we don't have customers
- ✍ World population. Less people.

## Large Firms

- ✍ Declining enrollment in school district. Declining revenues
- ✍ Economic development has come to little growth, if any, layoffs less money in NE MN, slow growth of economic development
- ✍ Economy probably
- ✍ I think the work force eligibility declined. Tighter rules and regulations and less money to do the work
- ✍ Much more foreign competition
- ✍ Not as much work available
- ✍ Overseas competition has really hurt us. The energy cost has hurt us and just the economy, period.
- ✍ People not wanting to work
- ✍ Reimbursements, regulations, number of employees declined. We are subsidized by the government
- ✍ Revenue declined and enrollment
- ✍ Staffing, lack of employees
- ✍ State funding has diminished and enrollment also. Available employees is down
- ✍ The labor availability. It's a shrinking labor market and population
- ✍ The market has deteriorated due to increased imports of products. We're a three tier down effect on NAFTA imports, the sale of our equipment has been affected by the raw material resources coming into the country

- ✍ The nature of our industry is on a downturn with foreign steel. We are tied to shipping industry.
- ✍ There's been additional layoffs in the mining industry
- ✍ We are losing business and products (to Mexico).
- ✍ We do subcontracting for businesses and it is being shipped overseas to be done cheaper.
- ✍ Well, just companies that are downsizing and closing are reducing business opportunities.
- ✍ We're losing money

**Tables for Cross Tabulations for Gender and Age**

**2001 Survey of Households  
Northeastern Minnesota**

Final Report  
December 2001

Bureau of Business and Economic Research  
School of Business and Economics  
University of Minnesota Duluth  
Duluth, MN 55812



**Table 1**  
**Background Characteristics of All Respondents by Gender**  
**Northeast Minnesota Workforce Survey, 2001<sup>75</sup>**

<i>Item</i>	<i>Men</i>	<i>Women</i>	<i>Overall</i>
County of residence			
Douglas, Wisconsin (includes City of Superior)	0.8%	9.8%	10.2%
Aitkin	4.5	3.5	3.9
Carlton	6.9	7.8	7.4
Cook	1.7	1.3	1.4
Crow Wing	10.8	16.6	14.2
Itasca	7.6	7.3	7.4
Koochiching	3.9	3.1	3.4
Lake	3.0	2.8	2.9
St Louis (includes City of Duluth)	<u>50.8</u>	<u>47.8</u>	<u>49.1</u>
	100%	100%	100%
	(594)	(860)	(1453) <sup>76</sup>
Average number of miles from Duluth/Superior area:	70.4 (441)	75.0 (616)	73.0 (1058)
Average age of respondent	45.9 (584)	47.0 (826)	46.6 (1410)
Percent of respondents who are female	---	---	59.2%(1453)
Average number of people in household aged 16 and older	2.36 (589)	2.38 (851)	2.4 (1440)
Average number aged 16+ who are:			
working full-time	1.27 (588)	1.24 (851)	1.3 (1439)
working part-time	.56 (589)	.59 (851)	0.6 (1440)
looking for work	.23 (589)	.24 (851)	0.2 (1440)
Average age planning to retire (or retired) (range age 18 to 100)	58.56 (466)	60.53 (617)	59.7 (1083)
Percent who "never" plan to retire			6.6% (1160)

<sup>75</sup> Data are from a stratified random sample of households (and a random 16+ year old within selected households) in the 7 counties of northeastern Minnesota, plus adjacent Crow Wing County, and Douglas County in northwestern Wisconsin where Superior, one of the Port Cities, is located. The telephone survey was conducted in the summer, 2001.

<sup>76</sup> The number of cases that constitutes the base of percentages or averages is shown in parentheses.

Table 1, continued

<i>Item</i>	<i>Men</i>	<i>Women</i>	<i>Overall</i>	<i>sig</i>
Highest level of education completed by respondent				
Less than high school	0.9%	1.9%	1.5%	
Some high school	7.2	4.0	5.3	
High school graduate or GED	28.5	27.5	27.9	
Some technical school or two-year college	9.4	11.5	10.7	
Technical school or two-year college graduate	11.3	12.4	11.9	
Some classes at a four-year college	13.3	12.9	13.1	
Four year college graduate	17.4	19.3	18.4	
Some graduate work beyond a four year college degree	2.6	2.4	2.5	
Graduate or professional degree	<u>22.7</u>	<u>8.1</u>	<u>8.7</u>	
	100%	100%	100%	
	(586)	(850)	(1437)	
Percent surveyed before September 11 <sup>th</sup>			92.6 (1453)	

**Table 2**  
**Work Preferences of those NOT Currently Working, by Gender**  
**Northeast Minnesota Workforce Survey, 2001<sup>77</sup>**

<i>Item</i>	<i>Men</i>	<i>Women</i>	<i>Overall</i>
Percent <u>NOT</u> currently employed			36.2% (1452)
Percent <u>of those not currently employed</u> who are retired			70.0% (526)
Percent of retired who would like to work <u>part-time</u>	14.4% (153)	8.1% (211)	10.7% (366)
Percent of retired who would like to work <u>full-time</u>	4.6% (153)	1.4% (211)	2.7% (366)
Percent who have <u>looked for a job</u> in the last month	1.3% (155)	0.5% (211)	0.8% (367)
Percent of retired who are currently taking steps to start a <u>new business</u> by themselves or with someone else	1.9% (155)	1.4% (212)	1.6% (367)
Percent <u>unemployed but not retired</u>			30.0% (159)
Percent of unemployed who would like to work <u>part-time</u>	32.2% (58)	33.7% (98)	32.7% (156)
Percent of unemployed who would like to work <u>full-time</u>	62.1% (58)	27.6% (98)	40.4% (156)
Percent who have <u>looked for a job</u> in the last month	77.6% (58)	29.3% (99)	46.8% (156)
Average number of <u>weeks since last job</u> among unemployed	24.3 (55)	201.4 (75)	126.6 (129)
Percent of retired who are currently taking steps to start a <u>new business</u> by themselves or with someone else	10.0% (60)	6.1% (99)	7.5% (159)
Average number of work skills or talents respondent would LIKE to use in a job? (see Appendix A for listing)			1.9 (169)

<sup>77</sup> Data are from a stratified random sample of households (and a random 16+ year old within selected households) in the 7 counties of northeastern Minnesota, plus adjacent Crow Wing County, and Douglas County in northwestern Wisconsin where Superior, one of the Port Cities, is located. The telephone survey was conducted in the summer, 2001.

Percent who <i>would</i> take a job that DID NOT offer the following benefits?			
Medical coverage	57.6% (85)	61.7% (81)	59.3% (167)
Life insurance	69.6% (83)	80.3% (76)	74.4% (160)
Contributions to a retirement plan	60.2% (83)	67.9% (81)	63.8% (163)
Paid vacation	61.7% (81)	64.1% (78)	63.1% (160)
How many miles would you be <i>willing to travel</i> one-way to work?			
0 - 15 miles	16.7% (90)	27.6% (87)	46.3%
16 – 30 miles	60.0% (90)	44.8% (87)	35.8
31 – 60 miles	20.0% (90)	25.3% (87)	14.2
61 miles or more	3.3% (90)	2.3% (87)	<u>3.7</u>
			100.0 (162)

**Table 3**  
**Characteristics of Respondents Who Are Currently Employed, by Gender**  
**Northeast Minnesota Workforce Survey, 2001<sup>78</sup>**

<i>Item</i>	<i>Men</i>	<i>Women</i>	<i>Overall</i>
Percent who ARE currently employed	63.9% (592)	63.8% (860)	63.8% (1452) <sup>79</sup>
Among the currently employed			
Percent who are self-employed	18.8% (378)	14.2% (549)	16.1% (927)
Percent who are "on call" (for example, a substitute teacher or trucker)	8.3% (374)	7.1% (549)	7.7% (924)
Percent who are independent contractors	12.4% (378)	7.7% (548)	9.6% (926)
Percent employed through a temporary agency (such as "Manpower" or "Temps")	0.5% (378)	0.9% (549)	0.8% (928)
Average number of <i>different employers</i> respondents currently work for part-time or full-time including self-employed. (Range 1-7)	1.3% (376)	1.2% (548)	1.2 (927)
Total hours worked per week, average	44.8% (372)	35.8% (539)	39.5 (911)
Percent who changed employers during 2000	16.9% (378)	16.1% (548)	16.3% (925)
Percent who have some job that pays more than \$10 per hour	78.9% (369)	63.4% (541)	69.6% (912)
Percent who get any of the following fringe benefits from their jobs			
Medical coverage	70.5% (376)	53.3% (546)	60.3% (922)
Life insurance	56.0% (373)	50.5% (547)	52.8% (919)
Contributions to a retirement plan	62.5% (376)	58.9% (547)	60.3% (924)
Paid vacation	65.8% (377)	64.6% (545)	65.1% (921)

<sup>78</sup> Data are from a stratified random sample of households (and a random 16+ year old within selected households) in the 7 counties of northeastern Minnesota, plus adjacent Crow Wing County, and Douglas County in northwestern Wisconsin where Superior, one of the Port Cities, is located. The telephone survey was conducted in the summer, 2001.

<sup>79</sup> The number of cases that constitutes the base of percentages or averages is shown in parentheses.



Table 3, continued

<i>Item</i>	<i>Men</i>	<i>Women</i>	<i>Overall</i>
How satisfied are you with your current work situation?			
Very satisfied	52.0%	56.7%	54.8%
Somewhat satisfied	37.6	33.1	34.9
Somewhat dissatisfied	8.0	8.4	8.3
Very dissatisfied	<u>2.4</u>	<u>1.8</u>	<u>2.1</u>
	100%	100%	100%
	(375)	(547)	(921)
Percent of employed who would like to change how much they work	38.2% (372)	35.1% (539)	36.4% (913)
Desired type of change for those who would like to change how much they work.			
Work fewer different jobs	19.6% (143)	10.2% (187)	14.0% (329)
Work fewer hours at the jobs you now have	72.5% (142)	60.3% (189)	65.4% (332)
Work more hours at the jobs you now have	16.9% (142)	29.6% (189)	24.2% (331)
Work at additional jobs either part-time or full-time	14.1% (142)	9.6% (189)	11.2% (331)
Other changes	28.9% (142)	21.7% (189)	24.7% (332)
Percent of employed who would like to change how much they work	16.7% (366)	12.6% (516)	14.3% (882)
Percent currently looking for an additional full-time or part-time job			
Looking for a full-time	8.0%	6.9%	7.5%
Looking for a part-time	8.5	7.3	7.7
Not looking for a job	<u>83.5</u>	<u>85.7</u>	<u>84.8</u>
	100%	100%	100%
	(376)	(547)	(922)

**Table 4**  
**Under-employment of Respondents Who Are Currently Employed, by Gender**  
**Northeast Minnesota Workforce Survey, 2001<sup>80</sup>**

<i>Item</i>	<i>Men</i>	<i>Women</i>	<i>Overall</i>
Percent who say that the jobs they now have DO NOT USE all of their work SKILLS	41% (371)	29.2% (542)	34.0% (914) <sup>81</sup>
Average number of talents or skills listed (See Appendix B for list):	1.25% (158)	1.35% (165)	1.3 (324)
How difficult would it be to get a job in northeast Minnesota (north-west Wisconsin for Wisconsin respondents) that matches up with more of your skills?			
Very difficult	38.2%	19.6%	28.7%
Somewhat difficult	32.2	44.9	39.1
Not very difficult	19.1	31	25.1
Impossible because no such job is available	<u>10.5</u>	<u>4.4</u>	<u>7.2</u>
	100%	100%	100%
	(153)	(158)	(307)
Percent who would be <i>willing to change employment</i> if a job using more of their work skills became available?	60.8% (153)	61.9% (147)	61.3% (300)
Average lowest pay respondent would be willing to START at to take a job that used more of your skills (converted to hourly wage)	\$14.76 (88)	\$9.91 (84)	\$12.40 (173)
What distance respondent would be willing to travel one-way to work?			
0-15 miles	16.7%	27.6%	21.9%
16-30 miles	60%	80.9%	52.2
31-60 miles	20%	57.1%	23.0
61 miles or more	<u>3.3%</u>	<u>2.3%</u>	<u>2.8</u>
	100%	100%	100%
	(90)	(87)	(178)
Percent who <i>would</i> take a job using more of their skills even if it did <i>not</i> offer:			
Medical coverage	53.3% (90)	57.0% (86)	55.1% (176)
Life insurance	77.8% (90)	80.9% (89)	79.3% (179)
Contributions to a retirement plan	61.8% (89)	57.1% (91)	59.4% (180)
Paid vacation	41.8% (91)	48.3% (88)	45.3% (179)

<sup>80</sup> Data are from a stratified random sample of households (and a random 16+ year old within selected households) in the 7 counties of northeastern Minnesota, plus adjacent Crow Wing County, and Douglas County in northwestern Wisconsin where Superior, one of the Port Cities, is located. The telephone survey was conducted in the summer, 2001.

<sup>81</sup> The number of cases that constitutes the base of percentages or averages is shown in parentheses.

**Table 5**  
**Employment Preferences For Respondents Who Are Currently Employed or Who**  
**Are Unemployed And Express An Interest in Finding a Job, by Gender**  
**Northeast Minnesota Workforce Survey, 2001<sup>82</sup>**

<i>Item</i>	<i>Men</i>	<i>Women</i>	<i>Overall</i>
If a suitable job were available where would the respondent like that job to be located:			
In the Duluth or Superior area	62.2% (452)	51.9% (621)	56.2% (1071)
In another area within northeast Minnesota	53.8% (455)	38.7% (604)	45.2% (1057)
In greater Minnesota but outside northeast Minnesota	32.1% (448)	22.3% (609)	26.5% (1057)
In the Twin Cities metro area	18.1% (459)	11.6% (628)	14.4% (1086)
Outside Minnesota	30.8% (441)	19.1% (617)	24.0% (1058)
Among respondents who would like a job in Duluth/Superior or Northeast Minnesota:			
Percent who would stay in this region even if they were paid less than the wage they could get elsewhere?			
Prefer a job in Duluth	66.1% (257)	72.2% (306)	69.6% (562)
Prefer a job in Northeastern Minnesota	74.7% (83)	79.2% (130)	77.6% (214)
Percent who would you like to have a job where they worked at home by connecting to their employer through a computer?	39.9% (451)	50.8% (620)	46.2% (1071)
Percent of <u>all respondents</u> who <i>plan to leave</i> Northeast Minnesota (or western Wisconsin for Douglas County respondents) in the next year?	8.7% (578)	5.7% (841)	6.8% (1419)
Percent of all respondents who have registered with any state employment agency in the last two years.	11.0% (590)	6.2% (856)	8.2% (1446)
Percent who are currently registered with any state employment agency among those ever registered in the past two years.	80.0% (60)	72.3% (47)	76.4% (106)

<sup>82</sup> Data are from a stratified random sample of households (and a random 16+ year old within selected households) in the 7 counties of northeastern Minnesota, plus adjacent Crow Wing County, and Douglas County in northwestern Wisconsin where Superior, one of the Port Cities, is located. The telephone survey was conducted in the summer, 2001.

**Table 6**  
**Respondent Licenses, Certificates and Skill Training, by Gender**  
**Northeast Minnesota Workforce Survey, 2001**

<i>Item</i>	<i>Men</i>	<i>Women</i>	<i>Overall</i>
Percent who have ever had any job-related certificates, licenses or degrees? (See Appendix C for a listing)	57.5% (584)	53.6% (856)	55.2% (1438)
Average number of degrees, licenses, certificates listed	1.79 (336)	0.87 (459)	1.7 (795)
Percent who are you currently <i>taking courses or training programs</i> to update skills or gain new skills	17.8% (591)	23.2% (857)	21.0% (1448)
Among those taking courses or training programs, how is this paid?			
At the work place	27.9%	21.9%	23.8%
Reimbursed by employer	26.9	23.5	23.5
Paid by respondent	31.7	43.4	39.1
Other	<u>13.5</u>	<u>13.3</u>	<u>13.6</u>
	100%	100%	100%
	(104)	(196)	(302)

**Table 7**  
**Respondent Interest in Specified Skills, by Gender**  
**Northeast Minnesota Workforce Survey, 2001<sup>83</sup>**

<i>Item</i>	<i>Men</i>	<i>Women</i>	<i>Overall</i>
Finding information on the internet			
Skill I would like to learn but do not possess	13.6%	15.2%	14.6%
Skill I could use if I had a week or two of training	15.2	16.6	16.0
Current skill that needs no training	40.0	41.0	40.5
No interest in learning this skill	<u>31.2</u>	<u>27.2</u>	<u>28.8</u>
	100%	100%	100%
	(587)	(832)	(1441)
Software development and programming			
Skill I would like to learn but do not possess	15.9%	20.6%	18.6%
Skill I could use if I had a week or two of training	11.4	12.5	12.0
Current skill that needs no training	9.0	5.3	6.8
No interest in learning this skill	<u>63.7</u>	<u>61.7</u>	<u>62.5</u>
	100%	100%	100%
	(590)	(832)	(1442)

<sup>83</sup> Data are from a stratified random sample of households (and a random 16+ year old within selected households) in the 7 counties of northeastern Minnesota, plus adjacent Crow Wing County, and Douglas County in northwestern Wisconsin where Superior, one of the Port Cities, is located. The telephone survey was conducted in the summer, 2001.

Machine or process control programming			
Skill I would like to learn but do not possess	15.6%	8.6%	11.5%
Skill I could use if I had a week or two of training	11.6	4.6	7.4
Current skill that needs no training	6.8	2.9	4.5
No interest in learning this skill	<u>66.0</u>	<u>83.9</u>	<u>76.7</u>
	100%	100%	100%
	(577)	(828)	(1405)
Computer or electronic repair			
Skill I would like to learn but do not possess	17.6%	9.0%	12.3%
Skill I could use if I had a week or two of training	7.1	4.1	5.3
Current skill that needs no training	7.9	2.7	4.8
No interest in learning this skill	<u>68.0</u>	<u>84.3</u>	<u>77.6</u>
	100%	100%	100%
	(593)	(860)	(1452)
<b>Item</b>	<b>Men</b>	<b>Women</b>	<b>Overall</b>
Summarizing data and writing a report			
Skill I would like to learn but do not possess	5.8%	11.2%	9.0%
Skill I could use if I had a week or two of training	7.8	7.3	7.5
Current skill that needs no training	20.3	25.1	23.1
No interest in learning this skill	<u>66.2</u>	<u>56.4</u>	<u>60.5</u>
	100%	100%	100%
	(591)	(858)	(1449)
Instructing others			
Skill I would like to learn but do not possess	11.7%	10.7%	11.0%
Skill I could use if I had a week or two of training	10.2	7.7	8.7
Current skill that needs no training	35.0	37.8	36.7
No interest in learning this skill	<u>43.1</u>	<u>43.8</u>	<u>43.6</u>
	100%	100%	100%
	(591)	(852)	(1442)
Repairing mechanical systems			
Skill I would like to learn but do not possess	14.6%	4.1%	8.4%
Skill I could use if I had a week or two of training	8.3	3.9	5.7
Current skill that needs no training	24.7	3.0	11.9
No interest in learning this skill	<u>52.4</u>	<u>89.0</u>	<u>74.0</u>
	100%	100%	100%
	(590)	(856)	(1445)
Selling to the general public			
Skill I would like to learn but do not possess	6.4%	2.8%	4.3%
Skill I could use if I had a week or two of training	4.4	3.9	4.1
Current skill that needs no training	22.7	20.8	21.5
No interest in learning this skill	<u>66.5</u>	<u>72.6</u>	<u>70.0</u>
	100%	100%	100%
	(591)	(857)	(1448)
Managing business operations			
Skill I would like to learn but do not possess	14.1%	11.9%	12.8%
Skill I could use if I had a week or two of training	10.8	11.7	11.4
Current skill that needs no training	22.4	21.7	22.0
No interest in learning this skill	<u>66.5</u>	<u>54.7</u>	<u>53.8</u>
	100%	100%	100%

	(594)	(856)	(1451)
Percent currently <i>“very”</i> or <i>“somewhat”</i> skilled in selected areas:			
Algebra	66.4% (587)	50.2% (857)	56.8% (1444)
Calculus	23.9% (589)	11.7% (859)	16.7% (1448)
Figuring out technical problems	77.6% (584)	53.6% (845)	63.3% (1428)
Knowledge in biology, physics or another physical science	49.8% (593)	46.2% (896)	47.6% (1448)
Any computer programming language	25.2% (593)	28.0% (859)	26.9% (1453)
Managing technical work teams			35.4% (1430)

**Table 7a**  
**Interest in Selected Skills for All Respondents, by Gender – Reorganized Data**  
**Northeast Minnesota Workforce Survey, 2001**

<i>Item</i>	<i>Men</i>	<i>Women</i>	<i>Overall</i>
Respondent has <u>no interest in learning this skill</u>			
Finding information on the Internet	31.2% (587)	27.2% (854)	28.8%
Software development and programming	63.7% (590)	61.7% (832)	62.5%
Machine or process control programming	66.0% (577)	83.9% (828)	76.7%
Computer or electronic repair	68.0% (593)	84.3% (860)	77.6%
Summarizing data and writing a report	66.2% (591)	56.4% (858)	60.5%
Instructing others	43.1% (591)	43.8% (852)	43.6%
Repairing mechanical systems	52.4% (590)	89.0% (856)	74.0%
Selling to the general public	66.5% (591)	72.6% (857)	70.0%
Managing business operations	52.7% (594)	54.7% (856)	53.8%
A <u>current skill</u> for which respondents would <u>need no training</u>			
Finding information on the Internet	40.0%	41.0%	40.5%
Software development and programming	9.0%	5.3%	6.8%
Machine or process control programming	6.8%	2.9%	4.5%
Computer or electronic repair	7.9%	2.7%	4.8%
Summarizing data and writing a report	20.3%	25.1%	23.1%
Instructing others	65.0%	37.8%	36.7%
Repairing mechanical systems	24.7%	3.0%	11.9%
Selling to the general public	22.7%	20.8%	21.5%
Managing business operations	22.4%	21.7%	22.0%
Skills that the respondent <u>could use with a week or two of training</u>			
Finding information on the Internet	15.2%	16.6%	16.0%
Software development and programming	11.4%	12.5%	12.0%
Machine or process control programming	11.6%	4.6%	7.4%
Computer or electronic repair	7.1%	4.1%	5.3%
Summarizing data and writing a report	7.8%	7.3%	7.5%
Instructing others	10.2%	7.7%	8.7%
Repairing mechanical systems	8.3%	3.9%	5.7%
Selling to the general public	4.4%	3.9%	4.1%
Managing business operations	10.8%	11.7%	11.4%
Skills that the respondent <u>would like to learn</u> but does not now possess			
Finding information on the Internet	13.6%	15.7%	14.6%
Software development and programming	15.9%	20.6%	18.6%
Machine or process control programming	15.6%	8.6%	11.5%
Computer or electronic repair	17.0%	9.0%	12.3%
Summarizing data and writing a report	5.5%	11.2%	9.0%
Instructing others	11.7%	10.7%	11.0%
Repairing mechanical systems	14.6%	4.1%	8.4%
Selling to the general public	6.4%	2.8%	4.3%
Managing business operations	14.2%	11.9%	12.8%

**Table 8**  
**Work Ethic Scale Responses for All Respondents, by Gender**  
**Northeast Minnesota Workforce Survey, 2001<sup>84</sup>**

<i>Item</i>	<i>Men</i>	<i>Women</i>	<i>Overall</i>
Hard work makes a man or woman a better person			
Strongly agree	35.1%	33.0%	33.9%
Agree	57.7	58.9	58.4
Disagree	6.0	7.2	6.7
Strongly disagree	<u>1.2</u>	<u>0.8</u>	0.9
	100%	100%	100%
	(570)	(833)	(1403)
Wasting time is as bad as wasting money.			
Strongly agree	32.1%	32.4%	32.3%
Agree	51.3	52.5	52.1
Disagree	15.4	12.4	13.6
Strongly disagree	<u>1.2</u>	<u>2.8</u>	2.1
	100%	100%	100%
	(573)	(834)	(1406)
A good indication of a man or woman's worth is how well they do their job.			
Strongly agree	32.6%	27.8%	29.8%
Agree	53.1	55.3	54.4
Disagree	13.1	14.9	14.1
Strongly disagree	<u>1.2</u>	<u>2.0</u>	1.7
	100%	100%	100%
	(567)	(835)	(1403)
If all other things are equal it is better to have a job with a lot of responsibility than one with little responsibility.			
Strongly agree	24.7%	19.2%	21.5%
Agree	56.0	54.2	54.9
Disagree	18.2	24.6	21.9
Strongly disagree	<u>1.1</u>	<u>2.0</u>	1.7
	100%	100%	100%
	(543)	(806)	(1350)

<sup>84</sup> Data are from a stratified random sample of households (and a random 16+ year old within selected households) in the 7 counties of northeastern Minnesota, plus adjacent Crow Wing County, and Douglas County in northwestern Wisconsin where Superior, one of the Port Cities, is located. The telephone survey was conducted in the summer, 2001.



## By Age of Respondent

The workforce, aged 16 and over, was divided into thirds for this report. Age groups are 16-37, 8-53, 54 and older.

**Table 9**  
**Background Characteristics of All Respondents by Age**  
**Northeast Minnesota Workforce Survey, 2001<sup>85</sup>**

<i>Item</i>	<i>16 to 37</i>	<i>38 to 53</i>	<i>54+ yrs</i>	<i>Overall</i>
County of residence	(455)	(470)	(485)	(1453) <sup>86</sup>
Douglas, Wisconsin (includes City of Superior)	11.0%	11.7%	7.8%	10.2%
Aitkin	2.4%	3.6%	5.4%	3.9
Carlton	6.8%	8.5%	7.2%	7.4
Cook	1.3%	1.3%	1.6%	1.4
Crow Wing	14.5%	11.7%	15.7%	14.2
Itasca	6.2%	9.4%	7.4%	7.4
Koochiching	2.4%	3.6%	4.5%	3.4
Lake	3.1%	2.3%	3.5%	2.9
St Louis (includes City of Duluth)	<u>52.3%</u>	<u>47.9%</u>	<u>46.8%</u>	<u>49.1</u>
	100%	100%	100%	100%
Average number of miles from Duluth/Superior area:	71.79(289)	71.34(361)	75.47(379)	73.0 (1058)
Average age of respondent	26.2%(454)	45.84(470)	66.34(485)	46.6 (1410)
Percent of respondents who are female				59.2%(1453)
Average number of people in household aged 16 and older	2.63(454)	2.53(470)	1.97(485)	2.4 (1440)
Average number aged 16+ who are:				
Working full-time	1.68 (454)	1.54 (470)	0.57 (484)	1.3 (1439)
Working part-time	0.74 (454)	0.70 (470)	0.33 (485)	0.6 (1440)
Looking for work	0.39 (454)	0.26 (470)	0.007 (485)	0.2 (1440)
Average age planning to retire (or retired) (range age 18 to 100)	58.17 (315)	60.34 (366)	60.42 (383)	59.7 (1083) 6.6% (1160)

<sup>85</sup> Data are from a stratified random sample of households (and a random 16+ year old within selected households) in the 7 counties of northeastern Minnesota, plus adjacent Crow Wing County, and Douglas County in northwestern Wisconsin where Superior, one of the Port Cities, is located. The telephone survey was conducted in the summer, 2001.

<sup>86</sup> The number of cases that constitutes the base of percentages or averages is shown in parentheses.

Table 9, continued

<i>Item</i>	<b>16 to 37</b>	<b>38 to 53</b>	<b>54+ yrs</b>	<b>Overall</b>
Highest level of education completed by respondent	(454)	(469)	(482)	(1437)
Less than high school	0.2%	0.0%	4.1%	1.5%
Some high school	10.4%	0.9%	5.2%	5.3
High school graduate or GED	27.8%	21.1%	34.9%	27.9
Some technical school or two-year college	9.5%	14.9%	7.9%	10.7
Technical school or two-year college graduate	11.9%	13.6%	10.4%	11.9
Some classes at a four-year college	15.2%	14.1%	10.4%	13.1
Four year college graduate	21.1%	20.9%	12.9%	18.4
Some graduate work beyond a four year college degree	1.1%	3.4%	2.9%	2.5
Graduate or professional degree	<u>2.9%</u>	<u>11.1%</u>	<u>11.4%</u>	<u>8.7</u>
	100%	100%	100%	100%
Percent surveyed before September 11 <sup>th</sup>	--	--	--	92.6 (1453)

**Table 10**  
**Work Preferences of those NOT Currently Working, by Age**  
**Northeast Minnesota Workforce Survey, 2001<sup>87</sup>**

<i>Item</i>	<b>16 to 37</b>	<b>38 to 53</b>	<b>54+ yrs</b>	<b>Overall</b>
Percent <u>NOT</u> currently employed				36.2% (1452)
Percent <u>of those not currently employed</u> who are retired				70.0% (526)
Percent of retired who would like to work <u>part-time</u>	N/a	23.5% (17)	10.9% (322)	10.7% (366)
Percent of retired who would like to work <u>full-time</u>	N/a	23.5% (17)	1.9% (322)	2.7% (366)
Percent who have <u>looked for a job</u> in the last month	N/a	5.6% (18)	0.6% (323)	0.8% (367)
Percent of retired who are currently taking steps to start a <u>new business</u> by themselves or with someone else	N/a	11.1% (18)	0.9% (323)	1.4% (367)
Percent <u>unemployed but not retired</u>				30.0% (159)
Percent of unemployed who would like to work <u>part-time</u>	45.5% (88)	17.0% (53)	21.4% (14)	32.7% (156)
Percent of unemployed who would like to work <u>full-time</u>	33.0% (88)	58.5% (53)	14.3% (14)	40.4% (156)
Percent who have <u>looked for a job</u> in the last month	52.3% (88)	43.6% (55)	28.6% (14)	46.8% (156)
Average number of <u>weeks since last job</u> among unemployed	58.3 (77)	146.6 (44)	649.5 (8)	126.6 (129)
Percent of retired who are currently taking steps				

<sup>87</sup> Data are from a stratified random sample of households (and a random 16+ year old within selected households) in the 7 counties of northeastern Minnesota, plus adjacent Crow Wing County, and Douglas County in northwestern Wisconsin where Superior, one of the Port Cities, is located. The telephone survey was conducted in the summer, 2001.

to start a <i>new business</i> by themselves or with someone else	9.0% (89)	5.6% (54)	0.0% (15)	7.5% (159)
How difficult do you think it would be to get a job in Northeast Minnesota (or Northwest Wisconsin for those in Douglas County) that matches up with your skills?				
Very difficult	3.3%	44.9%	22.7%	21.9%
Somewhat difficult	45.9%	22.4%	31.8%	34.2
Not very difficult	50.8%	24.5%	31.8%	37.4
Impossible because no such job is available	0.0%	8.2%	13.6%	6.5
	(61)	(49)	(44)	100.0% (155)
Average number of <i>hours worked per week</i> respondent would like to work when employed (range 6 – 60 hours)	31.8	38.5	29.6	33.2 (160)
Average number of weeks per year respondent liked to work when they were last employed (range 12 – 52).	44.9	47.7	36.7	43.2 (146)
Average lowest pay per hour that respondent would be willing to <i>start with</i> to take a job? (Range is \$5.00 to \$30.00)				\$10.00 (158)
Percent who <i>would</i> take a job that DID NOT offer the following benefits?				
Medical coverage	53.6%(69)	55.1%(49)	72.9%(48)	59.3% (167)
Life insurance	67.7%(651)	88.0%(50)	31.1%(45)	74.4% (160)
Contributions to a retirement plan	46.3%(67)	72.3%(47)	80.9%(47)	63.8% (163)
Paid vacation	53.1%(69)	71.1%(45)	67.4%(46)	63.1% (160)
How many miles would you be <i>willing to travel</i> one-way to work?				
0 - 15 miles	21.8%	17.5%	41.7%	46.3%
16 – 30 miles	56.4	47.4	33.3	35.8
31 – 60 miles	19.1	29.8	25.0	14.2
61 miles or more	2.7	5.3	0.0	<u>3.7</u>
	(110)	(57)	(12)	100.0 (162)

**Table 11**  
**Characteristics of Respondents Who Are Currently Employed, by Age**  
**Northeast Minnesota Workforce Survey, 2001<sup>88</sup>**

<i>Item</i>	<i>16 to 37</i>	<i>38 to 53</i>	<i>54+ yrs</i>	<i>Overall</i>
Percent who ARE currently employed	80.2%(364)	84.7%(398)	30.1%(485)	63.8% (1452) <sup>89</sup>
Among the currently employed				
Percent who are self-employed	12.1%(365)	17.9%(397)	22.1%(145)	16.1% (927)
Percent who are "on call" (for example, a substitute teacher or trucker)	5.8%(364)	8.1%(394)	11.0%(106)	7.7% (924)
Percent who are independent contractors	11.0%(364)	8.3%(397)	11.0%(145)	9.6% (926)
Percent employed through a temporary agency (such as "Manpower" or "Temps")	7.0%(364)	0.0%(398)	0.0%(146)	0.8% (928)
Average number of <i>different employers</i> respondents currently work for part-time or full-time including self-employed. (Range 1-7)	1.3(364)	1.2(345)	1.2(146)	1.2 (927)
Total hours worked per week, average	39.4(357)	40.5(343)	37.4(142)	39.5 (911)
Percent who changed employers during 2000	24.0%(362)	11.1%(397)	11.6%(146)	16.3% (925)
Percent who have some job that pays more than \$10 per hour	58.4%(363)	80.4%(388)	68.3%(142)	69.6% (912)
Percent who get any of the following fringe benefits from their jobs				
Medical coverage	54.4%(362)	67.8%(394)	51.7%(145)	60.3% (922)
Life insurance	43.6%(360)	63.7%(397)	43.1%(144)	52.8% (919)
Contributions to a retirement plan	49.6%(361)	71.6%(393)	53.7%(145)	60.3% (924)
Paid vacation	58.6%(362)	73.7%(395)	54.8%(146)	65.1% (921)
Percent distribution of the number of listed, currently held full or part-time jobs				83.7%
1				12.9
2				2.9
3				0.4
4				100% (927)
Average number of jobs listed				1.2 (927)

<sup>88</sup> Data are from a stratified random sample of households (and a random 16+ year old within selected households) in the 7 counties of northeastern Minnesota, plus adjacent Crow Wing County, and Douglas County in northwestern Wisconsin where Superior, one of the Port Cities, is located. The telephone survey was conducted in the summer, 2001.

<sup>89</sup> The number of cases that constitutes the base of percentages or averages is shown in parentheses.

Table 11, continued

<i>Item</i>	<b>16 to 37</b>	<b>38 to 53</b>	<b>54+ yrs</b>	<b>Overall</b>
How satisfied are you with your current work situation?				
Very satisfied	48.5%	57.5%	60.7%	54.8%
Somewhat satisfied	42.7	32.4	29.5	34.9
Somewhat dissatisfied	7.8	7.6	11.0	8.3
Very dissatisfied	1.1	2.5	2.8	<u>2.1</u>
	(361)	(395)	(115)	<u>100%</u> (921)
Percent of employed who would like to change how much they work	38.2%(361)	37.6%(388)	31.9%(144)	36.4% (913)
Desired type of change for those who would like to change how much they work.				
Work fewer different jobs	16.2%(136)	14.5%(145)	6.7%(45)	14.0% (329)
Work fewer hours at the jobs you now have	56.5%(138)	73.3%(146)	71.1%(45)	65.4% (332)
Work more hours at the jobs you now have	32.6%(138)	16.4%(143)	19.6%(46)	24.2% (331)
Work at additional jobs either part-time or full-time	14.6%(137)	7.5%(146)	16.1%(45)	11.2% (331)
Other changes	26.1%(138)	21.9%(146)	32.6%(46)	24.7% (332)
Percent planning to quit some current job within the next year	24.6%(345)	5.5%(385)	15.7%(134)	14.3% (882)
Percent currently looking for an additional full-time or part-time job	11.1%	5.8%	3.4%	7.5%
Looking for a full-time	11.1	7.3	1.4	7.7
Looking for a part-time	11.1	86.9	95.2	<u>84.8</u>
Not looking for a job	(361)	(396)	(145)	<u>100%</u> (922)

**Table 12**  
**Under-employment of Respondents Who Are Currently Employed, by Age**  
**Northeast Minnesota Workforce Survey, 2001<sup>90</sup>**

<i>Item</i>	<i>16 to 37</i>	<i>38 to 53</i>	<i>54+ yrs</i>	<i>Overall</i>
Percent who say that the jobs they now have DO NOT USE all of their work SKILLS	60.2% (359)	69.3% (347)	72.5% (142)	34.0% (914) <sup>91</sup>
Average number of talents or skills listed (See Appendix B for list):				1.3 (324)
How difficult would it be to get a job in northeast Minnesota (northwest Wisconsin for Wisconsin respondents) that matches up with more of your skills?				
Very difficult	25.4%	27.4%	38.1%	28.7%
Somewhat difficult	43.0	40.2	26.2	39.1
Not very difficult	28.2	23.9	19.0	25.1
Impossible because no such job is available	3.5	8.5	16.7	<u>7.2</u>
	(142)	(117)	(42)	100% (307)
Percent who would be <i>willing to change employment</i> if a job using more of their work skills became available?	76.9%(143)	53.6%(112)	36.1%(36)	61.3% (300)
Average lowest pay respondent would be willing to START at to take a job that used more of your skills (converted to hourly wage)	\$10.50 (106)	\$15.82 (53)	\$13.03 (30)	\$12.40 (173)
What distance respondent would be willing to travel one-way to work?				
0-15 miles	21.8%	17.5%	41.7%	21.9%
16-30 miles	56.4	47.4	33.3	52.2
31-60 miles	19.1	29.8	25.0	23.0
61 miles or more	2.7	5.3	0.0	<u>2.8</u>
	(143)	(112)	(36)	100% (178)
Percent who <i>would</i> take a job using more of their skills even if it did <i>not</i> offer:				
Medical coverage	63.9%(108)	35.2%(54)	72.7%(11)	55.1% (176)
Life insurance	80.7%(109)	77.2%(57)	83.3%(12)	79.3% (179)
Contributions to a retirement plan	64.5%(110)	48.2%(56)	66.7%(12)	59.4% (180)
Paid vacation	51.8%(110)	26.8%(56)	75.0%(12)	45.3% (179)

<sup>90</sup> Data are from a stratified random sample of households (and a random 16+ year old within selected households) in the 7 counties of northeastern Minnesota, plus adjacent Crow Wing County, and Douglas County in northwestern Wisconsin where Superior, one of the Port Cities, is located. The telephone survey was conducted in the summer, 2001.

<sup>91</sup> The number of cases that constitutes the base of percentages or averages is shown in parentheses.

**Table 13**  
**Employment Preferences For Respondents Who Are Currently Employed or Who**  
**Are Unemployed And Express An Interest in Finding a Job, by Age**  
**Northeast Minnesota Workforce Survey, 2001<sup>92</sup>**

<i>Item</i>	<i>16 to 37</i>	<i>38 to 53</i>	<i>54+ yrs</i>	<i>Overall</i>
If a suitable job were available where would the respondent like that job to be located:				
In the Duluth or Superior area	65.5%(420)	53.4%(440)	43.8%(92)	56.2%
In another area within northeast Minnesota	52.3%(417)	45.3%(428)	31.3%(192)	(1071) <sup>93</sup>
In greater Minnesota but outside northeast Minnesota	29.2%(411)	22.9%(436)	29.8%(191)	45.2%
In the Twin Cities metro area	24.0%(430)	7.7%(443)	8.8%(193)	(1057)
Outside Minnesota	29.4%(422)	22.7%(431)	15.6%(186)	26.5%
				(1057)
				14.4%
				(1086)
				24.0%
				(1058)
Among respondents who would like a job in Duluth/Superior or Northeast Minnesota:				
Percent who would stay in this region even if they were paid less than the wage they could get elsewhere?				
Prefer a job in Duluth	58.8%(257)	77.8%(221)	83.3%(78)	69.6% (562)
Prefer a job in Northeastern Minnesota	63.8%(80)	86.2%(94)	85.0%(40)	77.6% (214)
Percent who would you like to have a job where they worked at home by connecting to their employer through a computer?	51.5% (425)	43.4% (457)	34.2 (190)	46.2% (1071)
Percent of all respondents who <i>plan to leave</i> Northeast Minnesota (or western Wisconsin for Douglas County respondents) in the next year?	13.2%(432)	4.1%(469)	3.8(447)	6.8% (1419)
Percent of all respondents who have registered with any state employment agency in the last two years.	11.9%(447)	9.6%(469)	4.1%(486)	8.2% (1446)
Percent who are currently registered with any state employment agency among those ever registered in the past two years.	68.1%(47)	88.1%(42)	72.2%(18)	76.4% (106)

<sup>92</sup> Data are from a stratified random sample of households (and a random 16+ year old within selected households) in the 7 counties of northeastern Minnesota, plus adjacent Crow Wing County, and Douglas County in northwestern Wisconsin where Superior, one of the Port Cities, is located. The telephone survey was conducted in the summer, 2001.

<sup>93</sup> The number of cases that constitutes the base of percentages or averages is shown in parentheses.

**Table 14**  
**Respondent Licenses, Certificates and Skill Training, by Age**  
**Northeast Minnesota Workforce Survey, 2001<sup>94</sup>**

<i>Item</i>	<i>16 to 37</i>	<i>38 to 53</i>	<i>54+ yrs</i>	<i>Overall</i>
Percent who have ever had any job-related certificates, licenses or degrees? (See Appendix C for a listing)	--	--	--	55.2% (1438) <sup>95</sup>
Average number of degrees, licenses, certificates listed	--	--	--	1.7 (795)
Percent of certificates that are <u>currently valid</u>	--	--	--	83.3% (1267)
Percent with valid certificates currently working in same field	--	--	--	50.1% (1046)
Percent of respondents who currently <u>work in their certified field</u>	--	--	--	44.0% (1281)
Percent who are you currently <u>taking courses or training programs</u> to update skills or gain new skills	30.7% (453)	26.9% (469)	6.6% (483)	21.0% (1448)
Among those taking courses or training programs, how is this paid?	23.4%	21.4%	25.0%	23.8%
At the work place	15.3	34.1	21.9	23.5
Reimbursed by employer	48.2	28.6	43.9	39.1
Paid by respondent	13.1	15.9	9.4	13.6
Other	(137)	(126)	(32)	100% (302)

<sup>94</sup> Data are from a stratified random sample of households (and a random 16+ year old within selected households) in the 7 counties of northeastern Minnesota, plus adjacent Crow Wing County, and Douglas County in northwestern Wisconsin where Superior, one of the Port Cities, is located. The telephone survey was conducted in the summer, 2001.

<sup>95</sup> The number of cases that constitutes the base of percentages or averages is shown in parentheses.



**Table 15**  
**Respondent Interest in Specified Skills, by Gender**  
**Northeast Minnesota Workforce Survey, 2001<sup>96</sup>**

<i>Item</i>	<i>16 to 37</i>	<i>38 to 53</i>	<i>54+ yrs</i>	<i>Overall</i>
Finding information on the internet				
Skill I would like to learn but do not possess	9.3%	19.9%	15.4%	14.6%
Skill I could use if I had a week or two of training	21.6	17.6	10.6	16.0
Current skill that needs no training	56.2	44.8	22.0	40.5
No interest in learning this skill	12.9	17.8	52.0	<u>28.8</u>
	(450)	(467)	(481)	<u>100%</u> (1441) <sup>97</sup>
Software development and programming				
Skill I would like to learn but do not possess	22.4%	24.7%	10.7%	18.6%
Skill I could use if I had a week or two of training	18.8	13.1	4.2	12.0
Current skill that needs no training	7.4	9.0	3.8	6.8
No interest in learning this skill	51.5	53.3	81.3	<u>62.5</u>
	(447)	(458)	(476)	<u>100%</u> (1442)
Machine or process control programming				
Skill I would like to learn but do not possess	15.9%	13.1%	6.6%	11.5%
Skill I could use if I had a week or two of training	13.9	7.4	2.1	7.4
Current skill that needs no training	6.1	4.7	2.3	4.5
No interest in learning this skill	64.6	74.8	89.0	<u>76.7</u>
	(446)	(444)	(471)	<u>100%</u> (1405)
Computer or electronic repair				
Skill I would like to learn but do not possess	18.0%	15.3%	4.9%	12.3%
Skill I could use if I had a week or two of training	11.4	4.0	1.2	5.3
Current skill that needs no training	7.5	5.7	1.4	4.8
No interest in learning this skill	63.1	74.9	92.4	<u>77.6</u>
	(455)	(470)	(485)	<u>100%</u> (1452)

<sup>96</sup> Data are from a stratified random sample of households (and a random 16+ year old within selected households) in the 7 counties of northeastern Minnesota, plus adjacent Crow Wing County, and Douglas County in northwestern Wisconsin where Superior, one of the Port Cities, is located. The telephone survey was conducted in the summer, 2001.

<sup>97</sup> The number of cases that constitutes the base of percentages or averages is shown in parentheses.

Table 15, continued

<i>Item</i>	<i>16 to 37</i>	<i>38 to 53</i>	<i>54+ yrs</i>	<i>Overall</i>
Summarizing data and writing a report				
Skill I would like to learn but do not possess	11.7%	12.3%	3.9%	9.0%
Skill I could use if I had a week or two of training	10.4	7.9	5.2	7.5
Current skill that needs no training	27.9	27.9	14.0	23.1
No interest in learning this skill	50.0	51.9	76.9	<u>60.5</u>
	(452)	(470)	(485)	100% (1449)
Instructing others				
Skill I would like to learn but do not possess	18.0%	9.2%	7.1%	11.0%
Skill I could use if I had a week or two of training	14.9	7.7	4.4	8.7
Current skill that needs no training	39.8	46.4	23.4	36.7
No interest in learning this skill	27.3	36.7	65.1	<u>43.6</u>
	(455)	(466)	(479)	100% (1442)
Repairing mechanical systems				
Skill I would like to learn but do not possess	11.7%	10.7%	3.7%	8.4%
Skill I could use if I had a week or two of training	9.0	5.3	3.5	5.7
Current skill that needs no training	12.8	14.1	8.9	11.9
No interest in learning this skill	66.5	69.9	83.8	<u>74.0</u>
	(454)	(468)	(482)	100% (1445)
Selling to the general public				
Skill I would like to learn but do not possess	7.8%	3.0	2.5%	4.3%
Skill I could use if I had a week or two of training	8.4	1.7	2.5	4.1
Current skill that needs no training	24.2	23.5	17.2	21.5
No interest in learning this skill	59.9	71.9	77.8	<u>70.0</u>
	(454)	(469)	(482)	100% (1448)
Managing business operations				
Skill I would like to learn but do not possess	22.7%	13.0%	4.3%	12.8%
Skill I could use if I had a week or two of training	19.2	11.7	4.6	11.4
Current skill that needs no training	21.2	25.7	17.6	22.0
No interest in learning this skill	36.9	49.6	23.5	<u>53.8</u>
	(453)	(470)	(483)	100% (1451)
Percent currently "very" or "somewhat" skilled in selected areas:				
Algebra	71.7%(453)	59.1%(466)	40.7%(481)	56.8% (1444)
Calculus	25.3%(454)	17.5%(468)	8.3%(483)	16.7% (1448)
Figuring out technical problems	69.0%(454)	66.4%(468)	55.7%(469)	63.3% (1428)
Knowledge in biology, physics or other physical sci.	57.3%(454)	51.1%(470)	35.4%(481)	47.6% (1448)
Any computer programming language	38.4%(455)	27.5%(470)	15.1%(484)	26.9% (1453)
Managing technical work teams	35.7%(448)	41.5%(463)	28.4%(476)	35.4% (1430)

**Table 15a**  
**Interest in Selected Skills for All Respondents, by Gender – Reorganized Data**  
**Northeast Minnesota Workforce Survey, 2001**

<i>Item</i>	<i>16 to 37</i>	<i>38 to 53</i>	<i>54+ yrs</i>	<i>Overall</i>
<i>Respondent has <u>no interest in learning this skill</u></i>				
Finding information on the Internet	12.9% (450)	17.8% (467)	52.0% (481)	28.8% (1398)
Software development and programming	51.5% (447)	53.3% (458)	81.3% (476)	62.5% (1381)
Machine or process control programming	64.6% (446)	74.8% (444)	89.0% (471)	76.7% (1361)
Computer or electronic repair	63.1% (455)	74.9% (470)	92.4% (485)	77.6% (1410)
Summarizing data and writing a report	50.0% (452)	51.9% (244)	76.9% (485)	60.5% (1181)
Instructing others	27.3% (455)	36.7% (466)	65.1% (479)	43.6% (1400)
Repairing mechanical systems	66.5% (454)	69.9% (468)	83.8% (482)	74.0% (1404)
Selling to the general public	59.5% (454)	71.9% (468)	77.8% (482)	70.0% (1404)
Managing business operations	36.9% (453)	49.6% (470)	73.5% (483)	53.8% (1406)
<i>A <u>current skill</u> for which respondents would <u>need no training</u></i>				
Finding information on the Internet	56.2% “	44.8% “	2.2% “	40.5% “
Software development and programming	7.4%	9.0%	3.8%	6.8%
Machine or process control programming	6.1%	4.7%	2.3%	4.5%
Computer or electronic repair	7.5%	5.7%	1.4%	4.8%
Summarizing data and writing a report	27.9%	27.9%	14.0%	23.1%
Instructing others	39.8%	46.4%	23.4%	36.7%
Repairing mechanical systems	12.8%	14.1%	8.9%	11.9%
Selling to the general public	24.2%	23.5%	17.2%	21.5%
Managing business operations	36.9%	25.7%	17.6%	22.0%
<i>Skills that the respondent <u>could use with a week or two of training</u></i>				
Finding information on the Internet	21.6% “	17.6% “	10.6% “	16.0% “
Software development and programming	18.8%	13.1%	4.2%	12.0%
Machine or process control programming	13.5%	7.4%	2.1%	7.4%
Computer or electronic repair	11.4%	4.0%	1.2%	5.3%
Summarizing data and writing a report	10.4%	7.9%	5.2%	7.5%
Instructing others	14.9%	7.7%	4.4%	8.7%
Repairing mechanical systems	9.0%	5.3%	3.5%	5.7%
Selling to the general public	8.4%	1.7%	2.5%	4.1%
Managing business operations	19.2%	11.7%	4.6%	11.4%

**Table 16**  
**Work Ethic Scale Responses for All Respondents, by Gender**  
**Northeast Minnesota Workforce Survey, 2001<sup>98</sup>**

<i>Item</i>	<i>16 to 37</i>	<i>38 to 53</i>	<i>54+ yrs</i>	<i>Overall</i>
Hard work makes a man or woman a better person	(435)	(463)	(463)	(1403)
Strongly agree	30.3%	38.9%	34.3%	33.9%
Agree	60.2%	54.9%	59.8%	58.4
Disagree	7.8%	5.6%	5.7%	6.7
Strongly disagree	1.6%	0.6%	0.6%	<u>0.9</u>
				100%
Wasting time is as bad as wasting money.	(438)	(461)	(465)	(1406)
Strongly agree	29.5%	38.0%	31.4%	32.3%
Agree	49.1%	48.6%	56.6%	52.1
Disagree	20.1%	10.6%	9.9%	13.6
Strongly disagree	1.4%	2.8%	2.2%	<u>2.1</u>
				100%
A good indication of a man or woman's worth is how well they do their job.	(440)	(456)	(466)	(1403)
Strongly agree	23.6%	31.8%	35.6%	29.8%
Agree	55.0%	51.5%	55.4%	54.4
Disagree	18.6%	14.9%	8.4%	14.1
Strongly disagree	2.4%	1.8%	0.6%	<u>1.7</u>
				100%
If all other things are equal it is better to have a job with a lot of responsibility than one with little responsibility.	(429)	(449)	(436)	(1350)
Strongly agree	14.9%	23.4%	25.7%	21.5%
Agree	55.9%	51.9%	56.7%	54.9
Disagree	28.7%	20.7%	17.4%	21.9
Strongly disagree	0.5%	4.0%	0.2%	<u>1.7</u>
				100%

<sup>98</sup> Data are from a stratified random sample of households (and a random 16+ year old within selected households) in the 7 counties of northeastern Minnesota, plus adjacent Crow Wing County, and Douglas County in northwestern Wisconsin where Superior, one of the Port Cities, is located. The telephone survey was conducted in the summer, 2001.

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